ARS 44-79-4
DECEMBER 1963

1963 REPORT OF

EGG PRODUCTION TESTS

UNITED STATES AND CANADA

- **RANDOM SAMPLE EGG PRODUCTION TESTS**
  TWO YEAR COMBINED SUMMARY, 1961-62 AND 1962-63
  QUARTILE RANKINGS, 1962-63

- **STANDARD EGG LAYING TESTS, 1962-63**

AGRICULTURAL RESEARCH SERVICE • U.S. DEPARTMENT OF AGRICULTURE

FOREWORD

Egg Production Tests are designed to provide a reliable guide for poultrymen, hatcherymen, and breeders concerning the performance of stocks offered for sale by breeders and hatcherymen. This publication contains data on traits of economic importance compiled from results of all official Random Sample and Standard Egg Laying Tests in the United States and Canada.

The publication is divided into three separate categories: 1 - Two-Year Combined Summary of Random Sample Test data for the 1961-62 and 1962-63 test years; 2 - Quartile Ranking for the 1962-63 test year; 3 - Official Standard Egg Laying Test data for the 1962-63 test year. The first deals with data obtained from the 1961-62 and 1962-63 Random Sample Egg Production Tests. These data have been treated by acceptable statistical procedures and permit direct comparison of stocks that are entered in different tests. The second deals with the 1962-63 Random Sample Egg Production Test results and shows, by "quartile rankings", the performance of each entry as compared to other entries in the same test. The third section concerns records compiled by stocks in the 1962-63 Official Standard Egg Laying Tests.

CONTENTS

This publication is based upon recommendations of the National Committee on Random Sample Poultry Testing and the Council of American Official Poultry Tests. Information in the report was compiled by the Poultry Research Branch, Animal Husbandry Research Division, Agricultural Research Service, from data supplied by the Test Supervisors and the Council of American Official Poultry Tests. The statistical analysis for the Combined Summary was made by Biometrical Services, ARS. The publication of this report should not be construed as implying approval or endorsement by the U. S. Department of Agriculture of any of the stocks tested.

Alberta Random Sample Egg Production Test
R. H. McMillan, Alberta Department of Agriculture, Edmonton

British Columbia Random Sample Egg Production Test, Abbotsford
W. H. Pope, B. C. Department of Agriculture, Victoria

California Official Random Sample Egg Laying Test
Emery A. Johnson, Rt. 3, 2718 No. 99 Highway, Modesto

Central Random Sample Egg Production Test
M. S. Mitchell, Poultry Division, Canada Department of Agriculture, Ottawa

Florida Random Sample Test
A. W. O'Steen, Chipley

Iowa Multiple Unit Poultry Test
Elston P. Erickson, Iowa Poultry Association, National Plans Division Board, 535 E. Lincolnway, Ames

Kansas Multiple Unit Test
Albert W. Adams, Kansas State University, Manhattan

Minnesota Random Sample Egg Production Test, Stillwater and St. Cloud
Robert E. Moehrle, Department of Agriculture, Dairy and Food, State Office Bldg., St. Paul

Missouri Official Random Sample Poultry Test
Charles W. McElyea, Mountain Grove

New Brunswick Random Sample Egg Production Test
Bernard R. Bartlett, Department of Agriculture, Fredericton

New Hampshire Multiple Unit Egg Production Test
W. C. Skoglund, Department of Poultry Science, University of New Hampshire, Durham

New Jersey Random Sample Egg Laying Test
John J. Dowling, Jr., Rutgers University, New Brunswick

Central New York Official Random Sample Poultry Test, Horseheads
Dean R. Marble, Poultry Department, Cornell University, Ithaca

North Carolina Random Sample Egg Laying Test, Salisbury
G. A. Martin, School of Agriculture, North Carolina State College, Raleigh

Pennsylvania Random Sample Laying Test
Paul J. Turek, Route 2, Harrisburg

Rhode Island Random Sample Laying Test
M. R. McClung, University of Rhode Island, Kingston

Tennessee Random Sample Laying Test
O. E. Goff, University of Tennessee, Knoxville

Texas Random Sample Egg Production Test
Bill H. Doran, Texas A & M College, College Station

Wisconsin Random Sample Egg Production Test, Oregon
Arnold Guthrie, Department of Agriculture, State Capitol, Madison 2

TWO-YEAR COMBINED SUMMARY

INTRODUCTION

This summary includes the two-year combined results of the Random Sample Egg Production Tests conducted in the United States and Canada during 1961-62 and 1962-63. The entries in the various tests start with a random sample of hatching eggs or chicks of the stock being tested. The samples are drawn by prescribed methods to insure that each entry is typical of the stock it represents. All entries within a test are treated the same with respect to housing, feeding, management, and disease control with the objective of avoiding differences in performance due to environment.

All tests follow these basic principles in their operation. However, there are differences between tests and between years, including climatic conditions and other environmental factors, which affect the results. For this reason, direct comparison of the results of two stocks in different tests or different years may be misleading.

The primary purpose of this summary is the presentation of test results in a manner that will support sound evaluation of all stocks tested. To accomplish this, the results of all tests are combined, by stocks and by years, with adjustments for test and year differences and for variation in the amount of information per stock with accepted statistical procedures. The results of these computations are published as the regressed mean of each trait for each stock.

Errors of two kinds influence the results of even the most carefully designed and operated tests. The first kind of error is the chance deviation or unavoidable "sampling error" made when a small sample of eggs or chicks represents an entry. The other kind of error is due to uncontrolled or unknown environmental differences between entries that occur in spite of all efforts to treat all entries within a given test as nearly alike as possible. The differences between the results for two entries in a single test for a single year may be due to these chance variations rather than to a real difference in the performance capabilities of the two stocks. The effect of such errors in comparing stocks can be materially reduced by basing the comparisons on the combined results of several tests over two or more years. If all entries compared were entered in the same tests in both years, the simple averages could be compared directly without adjustment.

The performance data (regressed means) reported in this summary are derived from the results reported by the individual tests for each of the past two years. It is unlikely, however, that these means for any stock, even though entered in only one test each year, will coincide precisely with the two year average performance data as published by the test. The variations are due to adjustments for test differences, year differences, the number of tests and years entered, and the number of replicates per test. These statistical adjustments allow predictions to be made of what the average performance would have been for each stock if all stocks had been entered in all tests each year.

The statistical treatment applied to the test data is designed to reduce the influence of non-genetic variations but this cannot be accomplished perfectly. Consequently, estimates or predictions of performance cannot be made with absolute precision. Reliable predictions, within prescribed limitations, can be made as to whether a difference in the reported performance of two stocks represents a real difference in their performance. These predictions involve the use of the confidence interval figures which have been computed for each trait or performance factor reported.

HOW TO TELL WHETHER DIFFERENCES ARE REAL

The range of the confidence limits represents the amount of difference in the performance of two stocks that may be due to chance. If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level. If the confidence limits for two regressed means do not overlap, the odds are at least 19 in 20 that a real difference exists in the performance of the two stocks.

The following is a partial page of Regressed Means and 80% Confidence Limits as they might appear in this publication.

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	173		199		63.7		2.08		4.20		24.3		67.9		4.6	
175	177	204	209	64.8	65.9	2.21	2.34	4.30	4.40	24.5	24.7	69.7	71.5	4.7	4.8	995
	175		208		66.5		1.99		4.10		24.3		68.1		4.1	
177	179	215	222	67.9	69.3	2.12	2.25	4.21	4.32	24.7	25.1	70.1	72.1	4.3	4.5	996
	181		194		59.2		1.91		4.31		25.1		74.6		4.8	
184	187	200	206	60.3	61.4	2.06	2.21	4.42	4.53	25.4	25.7	76.6	78.6	5.1	5.4	997
	181		189		59.0		1.67		4.44		24.7		71.6		4.8	
183	185	196	203	60.1	61.2	1.81	1.95	4.57	4.70	25.1	25.5	74.1	76.6	4.9	5.0	998
	166		236		69.9		2.49		3.98		23.7		60.5		4.4	
169	172	241	246	71.2	72.5	2.62	2.75	4.08	4.18	23.9	24.1	62.4	64.3	4.6	4.8	999

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

The use of the above data as a means of evaluating different stocks and traits can be illustrated as follows:

For the trait "Hen Housed Egg Production" the confidence limits for Stock 995 (199 to 209) do not overlap the confidence limits of Stock 999 (236 to 246). Therefore, the regressed means of these two stocks (204 and 241 eggs, respectively) are significantly different at the 5% level for this trait. However, when comparing Stock 995 with Stocks 996, 997, and 998, we find that the confidence limits of this stock (199 to 209) overlap the confidence limits of each of the other three stocks (208 to 222, 194 to 206, and 189 to 203, respectively). Thus the regressed mean of Stock 995 is not significantly different from the regressed means of Stocks 996, 997, and 998 for this trait.

Another example can be shown by using the trait "Feed Per 24 Ounces of Eggs Produced." Stock 995, with confidence limits of 4.20 to 4.40, is significantly more efficient for this trait than Stock 998 which has a higher confidence limits (4.44 to 4.70) that do not overlap those of Stock 995. Likewise, when comparing Stock 995 with Stock 999 (confidence limits of 3.98 to 4.18) we find that these two sets of confidence limits do not overlap. However, in this example, Stock 995 is significantly less efficient than Stock 999 for this trait. In comparing Stock 995 with Stocks 996 and 997, we find that the confidence limits for all three of these stocks overlap and consequently these three stocks are not significantly different in this trait at the 5% level of probability.

The range of the confidence limits will not necessarily be the same for two different stocks that have the same regressed mean. The number of locations in which a stock is entered, the number of replicate pens per location, the number of years entered and the accuracy involved in adjusting for location and year effects all have a bearing on the range of the confidence limits for each individual regressed mean.

EXPLANATION OF INCOME FIGURES

The "Income Over Feed and Chick Cost" figures reported in this summary represent the sales value of the eggs produced and of the hens at the end of the test minus the cost of the chicks and the feed used during the growing and laying periods. These figures may be useful in comparing the overall performance of stocks but they should not be considered as predictions of "profit" to be obtained under commercial operations. The "income" figures should be reduced by other costs, such as labor, building and equipment depreciation, vaccination, litter, interest, taxes and insurance, to approximate profits that might be expected under commercial conditions. Surveys conducted among commercial producers indicate that such costs may range from $1.00 to $2.00 per pullet housed.

Although the average chick price is reported for each stock,this value cannot be appropriately used to convert the "Income Over Feed and Chick Cost" figure to an income over feed cost figure. The average chick price shown is a simple unadjusted average of the prices reported by the entrant for his entries in the various tests, and is not directly comparable to chick cost included in "Income Over Feed and Chick Cost."

STOCKS SHOULD BE COMPARED FOR ALL TRAITS

In the use of this report for the evaluation of the overall performance of the various stocks, all traits should be considered. The values reported for "Income Over Feed and Chick Cost" represent a composite of several traits combined as determined by the economic conditions of the areas in which the tests are located. The conditions under which the stock is expected to perform in commercial production may differ from those prevailing at the tests and such differences should be taken into consideration. For example, a poultryman whose local market pays unusually good premiums for large and extra large eggs should place more emphasis on egg size in his evaluation of stock than those located in areas where such premiums are not available. The local market preference for brown or white shells should also be taken into account. Traits related to interior egg quality which affect the grade are of greatest importance in areas where prices are based on quality standards.

Each person should study his local needs and conditions and then place the appropriate emphasis on the performance traits that are of greatest importance to his own situation. A productive and profitable stock for one poultryman under one set of conditions may not fit the needs of another poultryman under a different set of conditions.

A brief explanation of the statistical procedures used in computing the regressed means and confidence limits may be found on pages 35 through 42.

EXPLANATION OF TERMS AND ABBREVIATIONS

Stock: A term used to identify a specific breeding combination of chickens. These breeding combinations may include pure strains, strain crosses, breed crosses, incrossbreds, or combinations thereof.

Kind of Stock:

	AW	Austra White	LS	Light Sussex	BX	Crossbred
	BA	Black Australorp	NH	New Hampshire	IN	Incross
	BL	Brown Leghorn	RIR	Rhode Island Red	INX	Incrossbred
	BPR	Barred Plymouth Rock	RIW	Rhode Island White	LX	Line Cross
	CG	California Gray	WA	White Austra	PS	Pure Strain
	CR	Columbian Rock	WL	White Leghorn	SX	Strain Cross
	DW	Dominant White	WPR	White Plymouth Rock	MSC	Multiple Synthetic Cross
			Syn.	Synthetic		

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
3	Allstate Hatchery Willmar, Minnesota	WL SX	LX 330	13 8	43.2	3.6	3.2 4.1	10.3	9.6 11.1
317	Allstate Hatchery Willmar, Minnesota	WL SX	LX 360	1 1	42.0	3.5	3.3 3.7	10.9	10.5 11.2
5	Ames In-Cross Des Moines, Iowa	INX	Ames 424	26 17	46.4	3.0	2.6 3.4	10.0	9.3 10.8
7	Ames In-Cross Des Moines, Iowa	INX	Ames 434 R	24 13	46.5	3.4	3.0 3.9	11.8	11.0 12.6
8	Ames In-Cross Des Moines, Iowa	INX	Ames 505	16 7	45.6	2.7	2.3 3.1	9.0	8.3 9.7
578	Andrews, J. J., Rt. 3, Chilliwack, B. C.	WL SX	Andrews	2 1	30.0	3.1	2.9 3.4	10.6	10.1 11.0
537	Andrews, J. J., Rt. 3, Chilliwack, B. C.	CG x WL BX	Polka Dot	10 3	33.0	3.0	2.6 3.4	10.2	9.5 10.9
145	Animal Research Institute Ottawa, Ontario	WL PS	Random Bred	9 2	40.5	3.5	3.1 3.9	12.1	11.4 12.8
570	Animal Research Institute Kentville, Nova Scotia	WL PS	Kentville R. B. C.	4 1	40.0	3.2	2.9 3.5	10.7	10.2 11.3
10	Anthony, Geo. M. & Sons, Strausstown, Pennsylvania	WL SX	Anthony	12 6	38.6	2.9	2.5 3.3	10.9	10.2 11.7
573	Appleby Poultry Br. Farm, Mission, B. C.	WL SX	Life Line A	2 1	36.0	3.0	2.7 3.2	11.1	10.6 11.5
579	Appleby Poultry Br. Farm, Mission, B. C.	WL SX	Life Line B	2 1	36.0	3.3	3.0 3.5	10.4	10.0 10.9
138	Arbor Acres Farm, Inc., Glastonbury, Connecticut	WL SX	Queen	56 31	35.5	3.3	2.9 3.8	13.0	12.1 13.9
332	Ava Hatchery Ava, Missouri	WL SX	Certified	1 1	30.0	3.4	3.2 3.6	10.9	10.6 11.3
232	Avery, C. T. & Son Colrain, Massachusetts	RIR PS	Flock Mating	8 5	37.3	4.2	3.8 4.7	11.9	11.1 12.6
307	Babcock Poultry Farm, Inc., Ithaca, New York	WL SX	Babcock B-300	37 25	39.1	3.2	2.8 3.7	9.8	9.0 10.5
306	Babcock Poultry Farm, Inc., Ithaca, New York	CG x WL BX	Babcock B-370	10 7	39.0	3.3	2.9 3.7	9.7	9.0 10.4
577	Balakshin, N. A., Rt. 3, Chilliwack, B. C.	WL SX	Type B	2 1	30.0	3.6	3.3 3.8	11.5	11.0 11.9
505	Balakshin, N. A., Rt. 3, Chilliwack, B. C.	WL SX	Balakshin	8 2	33.8	3.4	3.0 3.8	9.5	8.9 10.2
293	Ball Poultry Farm Owego, New York	WL SX	Ball 551 A	4 4	38.0	3.7	3.3 4.0	11.0	10.4 11.6
318	Baum, Leon Locke, New York	CG x WL BX	B x W	1 1	38.0	3.2	3.0 3.4	10.2	9.9 10.6

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
		HEN HOUSED (No.)		HEN DAY (%)												
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	172		215		68.2		1.88		4.49		24.1		61.5		4.3	3
174	176	220	225	69.5	70.8	2.02	2.16	4.59	4.69	24.4	24.7	63.6	65.7	4.5	4.7	
	173		205		67.8		1.69		4.47		23.8		57.2		4.1	317
175	177	212	219	69.2	70.6	1.83	1.97	4.60	4.73	24.1	24.4	60.1	63.0	4.4	4.7	
	182		211		69.1		2.01		4.30		24.7		69.6		4.4	5
184	186	216	221	70.2	71.3	2.15	2.29	4.40	4.50	25.0	25.3	71.4	73.2	4.5	4.6	
	175		207		68.4		1.66		4.56		24.4		64.2		4.5	7
177	179	212	217	69.6	70.8	1.80	1.94	4.67	4.78	24.6	24.8	66.3	68.4	4.7	4.9	
	172		201		63.9		1.89		4.79		25.0		72.1		6.1	8
174	176	206	211	65.1	66.3	2.02	2.15	4.89	4.99	25.3	25.6	74.2	76.3	6.3	6.5	
	172		213		68.2		1.86		4.29		24.6		62.5		4.3	578
175	178	220	227	69.7	71.2	2.01	2.16	4.42	4.55	25.0	25.4	65.5	68.5	4.6	4.9	
	174		209		66.9		1.91		4.38		23.7		62.1		4.1	537
177	180	215	221	68.3	69.7	2.06	2.21	4.49	4.60	24.0	24.3	64.6	67.1	4.3	4.5	
	181		190		65.1		1.47		4.78		23.6		56.8		4.3	145
183	185	196	202	66.6	68.1	1.62	1.77	4.90	5.02	23.9	24.2	59.6	62.4	4.6	4.9	
	172		206		67.1		1.88		4.43		24.6		67.6		4.4	570
174	176	213	220	68.6	70.1	2.03	2.18	4.56	4.69	24.9	25.2	70.5	73.4	4.7	5.0	
	172		212		68.0		1.91		4.47		24.6		67.6		4.5	10
175	178	218	224	69.3	70.6	2.05	2.19	4.57	4.67	24.9	25.2	69.7	71.8	4.7	4.9	
	174		203		66.8		1.73		4.56		23.8		65.1		4.1	573
176	178	210	217	68.3	69.8	1.88	2.03	4.69	4.82	24.2	24.6	68.0	70.9	4.4	4.7	
	173		216		68.3		2.04		4.27		23.4		60.9		4.3	579
175	177	224	232	69.8	71.3	2.19	2.34	4.40	4.53	23.7	24.0	63.9	66.9	4.6	4.9	
	173		216		71.0		2.15		4.24		25.0		72.0		4.1	138
175	177	220	224	72.0	73.0	2.27	2.39	4.32	4.40	25.2	25.4	73.7	75.4	4.3	4.5	
	174		205		68.1		1.85		4.48		24.5		65.4		4.5	332
176	178	213	221	69.5	70.9	2.00	2.15	4.60	4.72	24.9	25.3	68.3	71.2	4.8	5.1	
	178		201		66.5		1.66		5.05		24.3		66.1		5.9	232
180	182	208	215	67.9	69.3	1.80	1.94	5.16	5.27	24.6	24.9	68.4	70.7	6.1	6.3	
	166		228		70.6		2.17		4.27		24.6		67.5		4.5	307
169	172	232	236	71.8	73.0	2.31	2.45	4.37	4.47	24.9	25.2	69.6	71.7	4.7	4.9	
	167		222		69.2		1.99		4.42		24.2		62.5		5.1	306
170	173	228	234	70.5	71.8	2.13	2.27	4.53	4.64	24.5	24.8	64.9	67.3	5.3	5.5	
	171		204		68.1		1.90		4.35		23.9		62.0		3.7	577
174	177	212	220	69.5	70.9	2.05	2.20	4.48	4.61	24.3	24.7	64.9	67.8	4.0	4.3	
	171		220		69.0		2.01		4.41		23.9		63.1		4.5	505
174	177	227	234	70.5	72.0	2.16	2.31	4.52	4.63	24.2	24.5	65.7	68.3	4.7	4.9	
	172		207		66.8		1.92		4.40		24.7		69.3		4.2	293
174	176	214	221	68.3	69.8	2.07	2.22	4.51	4.62	25.0	25.3	71.9	74.5	4.5	4.8	
	171		220		68.8		2.03		4.36		24.1		61.7		4.9	318
173	175	227	234	70.1	71.4	2.17	2.31	4.49	4.62	24.5	24.9	64.6	67.5	5.2	5.5	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
20	Beamsdale Farm Rt. 2, Lawndale, N. C.	WL SX	Beamsdale 66	6 2	39.3	3.6	3.2 4.0	9.7	9.1 10.3
22	Booth Farms & Hatchery Clinton, Missouri	INX	Booth Line 351	2 1	39.5	3.1	2.8 3.4	10.7	10.2 11.2
329	Booth Farms & Hatchery Clinton, Missouri	INX	Booth Line 352	1 1	34.0	3.3	3.1 3.5	10.8	10.5 11.2
230	Brender's Leghorns Ferndale, New York	WL SX	Money Maker #1	24 17	38.6	3.0	2.6 3.5	9.8	9.1 10.6
308	Brender's Leghorns Ferndale, New York	WL SX	Brender Beauty	6 4	39.0	3.1	2.8 3.4	10.2	9.6 10.8
506	Buchanan's Poultry Ranch Haney, B. C.	WL x (WLxBA)	Kanaka White	8 2	34.5	3.4	3.0 3.8	10.8	10.1 11.5
571	Buchanan's Poultry Ranch Haney, B. C.	WL x Syn. BX	Monarch	2 1	34.0	3.5	3.2 3.7	11.2	10.8 11.7
26	Bundesen Bros., Petaluma, California	CG x WL BX	Graycie	6 2	36.0	3.1	2.8 3.5	10.2	9.6 10.9
561	Burpee, A. K., Woodstock, N. B.	WL x LS BX	Burpee's #31	2 1	32.0	3.5	3.3 3.8	11.1	10.6 11.5
544	Burpee, A. K., Woodstock, N. B.	WL x (RIRxLS)	Burpee's 321	8 2	30.8	3.6	3.2 4.1	11.6	10.9 12.3
283	Cameron Leghorn Res. Farm Beaver Springs, Penna.	WL SX	Cameron 924	2 1	32.0	3.2	2.9 3.5	10.9	10.5 11.4
30	Carey Farms Marion, Ohio	WL SX	Carey Nicks	2 2	38.0	2.7	2.5 3.0	10.6	10.1 11.1
292	Carey Farms Marion, Ohio	WL SX	E. J.'s	3 3	39.5	3.9	3.6 4.3	11.7	11.2 12.3
31	Cashman Leghorn Farm Webster, Kentucky	WL SX	Hi-Cash	21 10	44.2	3.5	3.0 4.0	11.9	11.1 12.8
304	Cashman Leghorn Farm Webster, Kentucky	WL IN	Astronauts	2 1	44.0	3.1	2.8 3.4	10.7	10.2 11.1
32	Childers Hatchery Santa Ana, California	CG x WL BX	EGGSecutive	6 2	36.0	3.1	2.7 3.4	10.3	9.7 11.0
558	Clark, H. R., Burtt's Corner, N. B.	WL SX	Clark's #57	4 2	30.0	3.1	2.8 3.5	9.8	9.2 10.3
508	Clark's Poultry Farm Brandon, Manitoba	RIR x (LSxRIR)	Paymaster 101	4 1	32.0	3.3	3.0 3.7	11.0	10.4 11.6
289	Colonial Poultry Farms Pleasant Hill, Missouri	WL IN	True-Line 365B	13 9	43.9	3.6	3.2 4.1	11.3	10.5 12.1
330	Colonial Poultry Farms Pleasant Hill, Missouri	INX	True-Line #142	1 1	45.0	3.3	3.1 3.5	10.3	9.9 10.6
309	Davis, Joe K., Hatchery Earl, North Carolina	RIR x BPR BX	Davis Combiner	5 4	34.0	3.0	2.7 3.3	10.7	10.1 11.3

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	173		221		69.9		2.10		4.35		24.3		65.4		4.0	20
176	179	228	235	71.4	72.9	2.26	2.42	4.47	4.59	24.6	24.9	68.1	70.8	4.2	4.4	
	172		207		66.8		1.93		4.35		24.6		66.3		4.3	22
175	178	214	221	68.3	69.8	2.08	2.23	4.48	4.61	25.0	25.4	69.2	72.1	4.5	4.7	
	173		205		66.3		1.85		4.46		24.3		64.9		4.2	329
175	177	212	219	67.7	69.1	2.00	2.15	4.59	4.72	24.7	25.1	67.8	70.7	4.6	5.0	
	175		209		66.9		1.99		4.42		25.0		73.4		4.2	230
177	179	214	219	67.9	68.9	2.12	2.25	4.51	4.60	25.3	25.6	75.3	77.2	4.4	4.6	
	174		207		66.1		1.96		4.42		24.4		67.3		4.2	308
176	178	214	221	67.5	68.9	2.11	2.26	4.54	4.66	24.8	25.2	69.8	72.3	4.4	4.6	
	171		217		69.3		2.10		4.27		24.4		65.8		4.5	506
173	175	224	231	70.8	72.3	2.26	2.42	4.38	4.49	24.8	25.2	68.4	71.0	4.8	5.1	
	171		210		68.4		1.35		4.38		24.6		65.2		3.9	571
174	177	217	224	69.8	71.2	1.50	1.65	4.50	4.62	25.0	25.4	68.1	71.0	4.2	4.5	
	170		222		69.6		1.98		4.43		24.4		64.8		5.0	26
172	174	229	236	71.1	72.6	2.13	2.28	4.56	4.69	24.8	25.2	67.5	70.2	5.2	5.4	
	172		205		67.8		1.92		4.45		24.5		67.7		4.7	561
174	176	213	221	69.2	70.6	2.07	2.22	4.58	4.71	24.9	25.3	70.7	73.7	5.0	5.3	
	171		200		66.4		1.80		4.59		24.9		69.7		4.8	544
174	177	206	212	67.9	69.4	1.96	2.12	4.71	4.83	25.2	25.5	72.4	75.1	5.1	5.4	
	171		220		70.1		2.15		4.29		24.6		67.5		4.3	283
174	177	228	236	71.6	73.1	2.31	2.47	4.42	4.55	25.0	25.4	70.4	73.3	4.6	4.9	
	174		199		65.5		1.80		4.43		25.1		70.1		4.3	30
177	180	207	215	67.0	68.5	1.95	2.10	4.56	4.69	25.4	25.7	73.0	75.9	4.6	4.9	
	175		191		64.4		1.53		4.60		24.7		71.7		4.4	292
178	181	198	205	65.9	67.4	1.69	1.85	4.73	4.86	25.0	25.3	74.3	76.9	4.6	4.8	
	172		221		72.4		2.08		4.27		24.3		63.3		4.4	31
174	176	226	231	73.6	74.8	2.21	2.34	4.36	4.45	24.6	24.9	65.2	67.1	4.6	4.8	
	172		214		70.1		1.98		4.36		24.1		62.0		4.4	304
175	178	222	230	71.5	72.9	2.13	2.28	4.49	4.62	24.5	24.9	64.9	67.8	4.6	4.8	
	170		222		70.2		2.07		4.37		24.7		67.7		5.0	32
172	174	229	236	71.6	73.0	2.22	2.37	4.50	4.63	25.1	25.5	70.3	72.9	5.3	5.6	
	176		214		69.4		2.10		4.34		24.5		69.1		4.3	558
179	182	221	228	70.9	72.4	2.25	2.40	4.46	4.58	24.9	25.3	71.9	74.7	4.6	4.9	
	173		209		68.0		1.93		4.61		24.7		68.3		5.6	508
175	177	217	225	69.5	71.0	2.08	2.23	4.74	4.87	25.1	25.5	71.1	73.9	5.8	6.0	
	171		206		66.5		1.78		4.48		24.6		67.1		4.4	289
174	177	212	218	67.8	69.1	1.92	2.06	4.58	4.68	24.9	25.2	69.1	71.1	4.6	4.8	
	171		213		67.6		1.97		4.37		24.5		66.3		4.9	330
173	175	220	227	69.0	70.4	2.12	2.27	4.50	4.63	24.8	25.1	69.3	72.3	5.2	5.5	
	171		212		68.5		1.99		4.57		25.4		73.4		5.8	309
174	177	219	226	70.0	71.5	2.14	2.29	4.69	4.81	25.7	26.0	76.0	78.6	6.0	6.2	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

716-429 O - 63 - 2

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
48	DeKalb Agricultural Assoc., Sycamore, Illinois	INX	DeKalb 131	44 21	53.4	2.4	2.0 2.8	8.9	8.2 9.7
277	DeKalb Agricultural Assoc., Sycamore, Illinois	INX	DeKalb 151	24 11	55.7	2.9	2.5 3.3	9.2	8.5 10.0
52	Demler Farms Anaheim, California	Syn. x WL BX	Demler Kross	12 6	36.4	3.0	2.6 3.4	9.7	9.0 10.4
310	Demler Farms Anaheim, California	WL SX	Demler Regal	23 17	36.9	2.8	2.4 3.2	10.3	9.5 11.1
326	DeWitt's Hatchery Nacogdoches, Texas	WL SX	HD-300	1 1	30.0	3.2	3.1 3.5	10.3	10.0 10.7
563	deZeeuw Leghorn Breeder So. Edmonton, Alberta	WL SX	deZeeuw 621	2 1	38.0	3.1	2.9 3.3	10.0	9.6 10.4
514	deZeeuw Leghorn Breeder So. Edmonton, Alberta	WL SX	deZeeuw 752	12 3	37.7	3.8	3.4 4.2	10.7	10.0 11.4
271	Dryden Farms, Inc., Modesto, California	WL SX	SX 60	17 8	36.0	3.2	2.8 3.6	10.2	9.5 10.9
515	Early Hatcheries Saskatoon, Saskatchewan	WL x (RIRxLS)	Hi Layer	2 1	36.0	3.6	3.3 3.8	11.7	11.2 12.2
327	Eby's Poultry Farm Carrollton, Texas	WL IN	#681 Hybrids	4 3	35.0	3.0	2.7 3.3	9.6	9.1 10.2
564	Elander, P., Balcarres, Saskatchewan	WL SX	Starline	2 1	38.0	3.4	3.1 3.7	10.6	10.1 11.0
59	Erath Egg Farm Stephenville, Texas	WL SX	Erath Str. X	4 3	37.2	3.0	2.7 3.3	9.8	9.2 10.4
517	Evans, F. H., Abbotsford, B. C.	WL SX	Echo Leghorns	8 3	31.4	3.4	3.0 3.7	11.3	10.6 12.0
311	Evans, W. D. Hatchery Northampton, England	WL SX	Maxilay	6 5	55.4	3.6	3.2 4.0	10.1	9.5 10.7
518	Fisher Poultry Farm Ayton, Ontario	WL SX	Fisher 103	8 2	35.3	2.8	2.4 3.2	10.0	9.3 10.6
60	Fletcher Hatchery Concord, North Carolina	WL SX	FX 100	4 1	37.0	3.4	3.1 3.8	9.8	9.3 10.4
246	Forsgate Farms Jamesburg, New Jersey	WL SX	F 160	7 5	36.5	3.0	2.7 3.4	10.2	9.5 10.9
65	Garber Poultry Br. Farm Modesto, California	CG x WL BX	Gray Leghorn	8 4	36.0	2.9	2.6 3.3	9.6	8.9 10.3
66	Garber Poultry Br. Farm Modesto, California	WL SX	G 200	10 6	36.4	2.6	2.3 3.0	9.9	9.2 10.7
69	Garrison, Earl W., Bridgeton, New Jersey	RIR x WR BX	Golden Sex Link	2 1	32.0	3.4	3.1 3.6	11.7	11.2 12.2
70	Gasson's Poultry Farm Versailles, Ohio	WL SX	Gasson's G 33	5 3	40.3	3.2	2.9 3.6	9.9	9.3 10.6

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	
	166		230		70.7		2.18		4.14		24.3		64.4		4.2	48
169	172	234	238	71.7	72.7	2.31	2.44	4.23	4.32	24.6	24.9	66.2	68.0	4.3	4.4	
	171		216		68.0		2.09		4.17		24.9		69.6		4.0	277
173	175	221	226	69.1	70.2	2.22	2.35	4.26	4.35	25.1	25.3	71.5	73.4	4.2	4.4	
	169		218		68.2		1.98		4.40		24.5		65.1		4.8	52
172	175	223	228	69.5	70.8	2.13	2.28	4.50	4.60	24.8	25.1	67.3	69.5	5.0	5.2	
	167		220		69.2		2.00		4.28		24.5		66.4		4.2	310
169	171	225	230	70.4	71.6	2.15	2.30	4.39	4.50	24.8	25.1	68.6	70.8	4.4	4.6	
	173		212		67.8		2.00		4.44		24.5		67.5		4.3	326
176	179	219	226	69.2	70.6	2.15	2.30	4.57	4.70	24.9	25.3	70.5	73.5	4.6	4.9	
	173		216		68.7		2.21		4.14		24.2		64.9		4.1	563
175	177	224	232	70.2	71.7	2.36	2.51	4.27	4.40	24.6	25.0	67.8	70.7	4.4	4.7	
	173		208		67.9		1.96		4.43		24.2		65.3		4.3	514
176	179	214	220	69.3	70.7	2.11	2.26	4.54	4.65	24.5	24.8	67.8	70.3	4.5	4.7	
	176		213		68.6		2.08		4.33		24.8		71.0		4.6	271
178	180	219	225	69.9	71.2	2.23	2.38	4.45	4.57	25.2	25.6	73.4	75.8	4.8	5.0	
	172		201		67.4		1.76		4.47		24.3		63.5		5.0	515
174	176	208	215	68.9	70.4	1.91	2.06	4.60	4.73	24.7	25.1	66.4	69.3	5.3	5.6	
	173		219		68.7		2.08		4.37		24.6		65.8		4.1	327
175	177	226	233	70.2	71.7	2.23	2.38	4.49	4.61	25.0	25.4	68.5	71.2	4.3	4.5	
	173		207		67.1		1.85		4.48		24.4		65.4		4.7	564
175	177	215	223	68.6	70.1	2.00	2.15	4.61	4.74	24.7	25.0	68.3	71.2	5.0	5.3	
	174		215		68.6		2.07		4.33		25.1		70.8		4.2	59
176	178	222	229	70.1	71.6	2.22	2.37	4.45	4.57	25.4	25.7	73.5	76.2	4.4	4.6	
	178		214		71.1		2.03		4.43		24.6		69.6		4.9	517
181	184	220	226	72.6	74.1	2.18	2.33	4.54	4.65	24.9	25.2	72.2	74.8	5.1	5.3	
	178		212		68.3		1.91		4.39		24.2		66.0		4.3	311
181	184	218	224	69.8	71.3	2.06	2.21	4.51	4.63	24.6	25.0	68.5	71.0	4.5	4.7	
	172		215		67.3		2.05		4.38		24.8		68.2		4.3	518
174	176	221	227	68.7	70.1	2.20	2.35	4.50	4.62	25.1	25.4	70.8	73.4	4.5	4.7	
	174		204		66.3		1.80		4.58		24.6		67.1		4.2	60
177	180	211	218	67.8	69.3	1.95	2.10	4.71	4.84	24.9	25.2	69.9	72.7	4.4	4.6	
	176		216		68.9		2.10		4.34		24.6		69.9		4.2	246
178	180	222	228	70.3	71.7	2.25	2.40	4.45	4.56	25.0	25.4	72.3	74.7	4.4	4.6	
	168		222		69.3		2.09		4.27		25.1		69.7		4.8	65
170	172	228	234	70.7	72.1	2.24	2.39	4.39	4.51	25.4	25.7	72.2	74.7	5.0	5.2	
	171		218		69.2		2.17		4.28		24.6		69.0		4.4	66
173	175	224	230	70.5	71.8	2.32	2.47	4.39	4.50	24.9	25.2	71.4	73.8	4.6	4.8	
	176		192		64.3		1.61		4.89		26.2		81.4		6.1	69
178	180	199	206	65.8	67.3	1.76	1.91	5.02	5.15	26.5	26.8	84.3	87.2	6.4	6.7	
	172		219		69.5		2.15		4.27		24.4		67.1		4.1	70
174	176	226	233	70.9	72.3	2.30	2.45	4.38	4.49	24.7	25.0	69.7	72.3	4.3	4.5	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS
72	Ghostley's Poultry Farm Anoka, Minnesota	WL SX	Ghostley Pearl	67 31	43.1	3.3	2.8 3.8	10.3	9.5 11.1
335	Goertz, Dan K., Fresno 2, California	WL SX	Goertz	3 2	36.0	3.3	3.1 3.6	10.3	9.8 10.9
559	Goodine, G. A., Lower Southhampton, N. B.	RIR x WL BX	Goodine	2 1	28.0	3.3	3.0 3.5	10.3	9.9 10.8
331	Great Plains Hatcheries Effingham, Illinois	WL SX	Great Plains	1 1	33.0	3.0	2.8 3.2	10.6	10.3 11.0
566	Groupe Maska St. Hyacinthe, Quebec	WL SX	Corvette A1	4 2	38.5	3.2	2.9 3.6	10.6	10.1 11.2
567	Groupe d'Oka, Oka Two Mountains, Que.	WL SX	Oka 93	2 1	40.0	3.2	2.9 3.4	10.9	10.5 11.4
80	Hansen's Leghorn City Puyallup, Washington	WL SX	Criss Cross H25	19 9	39.9	3.0	2.5 3.4	10.7	9.9 11.5
82	Hansen's Leghorn City Puyallup, Washington	WL SX	Criss Cross 61	8 4	38.0	3.2	2.9 3.5	10.7	10.0 11.4
84	Hanson, J. A. & Son Corvallis, Oregon	WL SX	Super Nick	7 5	39.5	3.4	3.0 3.7	12.7	11.9 13.4
322	Hanson, J. A. & Son Corvallis, Oregon	WL SX	Super Nick A	1 1	40.0	3.5	3.3 3.7	11.0	10.6 11.4
337	Harco Orchards & Poultry Fr. So. Easton, Massachusetts	RIR PS	Group I	2 1	41.0	3.0	2.8 3.3	10.7	10.3 11.2
225	Harco Orchards & Poultry Fr. So. Easton, Massachusetts	RIR x BPR BX	Sex Link	16 11	39.3	3.1	2.7 3.5	9.5	8.8 10.3
86	Hardy, C. Nelson & Son Essex, Massachusetts	RIR x BPR BX	Sex Link	6 4	34.0	3.1	2.7 3.4	10.9	10.2 11.5
88	Heisdorf & Nelson Farms Kirkland, Washington	WL SX	Nick Chick	74 31	43.4	3.0	2.6 3.5	8.3	7.6 9.1
252	Heisdorf & Nelson Farms Kirkland, Washington	WL SX	Mark II	18 11	44.0	2.9	2.5 3.4	9.5	8.8 10.3
275	Heisdorf & Nelson Farms Kirkland, Washington	Syn. x WL BX	Breed Cross	6 2	32.5	2.8	2.5 3.2	9.3	8.7 9.9
316	Heisey Leghorn Farms Mt. Joy, Pennsylvania	WL SX	H-K-Cross	1 1	30.0	3.3	3.1 3.5	10.4	10.0 10.7
313	Hill Top Poultry Farm Hawley, Pennsylvania	WL SX	Hill Top 285-B	1 1	32.0	2.9	2.7 3.1	9.9	9.6 10.3
92	Honegger Breeder Hatchery Forrest, Illinois	WL SX	Honegger Layer	47 20	42.6	2.9	2.5 3.4	9.5	8.8 10.3
93	Honegger Breeder Hatchery Forrest, Illinois	WL SX	Honegger Layer 62	4 3	44.7	2.9	2.6 3.3	10.5	9.9 11.1
321	Honegger Farms Co., Inc., Forrest, Illinois	Syn. x WL BX	Honegger H-80	8 6	42.0	3.0	2.7 3.4	10.4	9.7 11.1

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	173		215		68.9		2.00		4.44		24.7		69.2		4.4	72
175	177	219	223	69.9	70.9	2.12	2.24	4.52	4.60	25.0	25.3	70.8	72.4	4.5	4.6	
	174		199		65.4		1.76		4.51		25.0		71.1		4.2	335
176	178	207	215	66.9	68.4	1.91	2.06	4.63	4.75	25.4	25.8	73.9	76.7	4.4	4.6	
	174		207		67.1		1.97		4.52		25.1		72.8		4.8	559
176	178	214	221	68.5	69.9	2.12	2.27	4.65	4.78	25.4	25.7	75.7	78.6	5.1	5.4	
	173		211		67.5		1.96		4.41		24.2		62.8		3.9	331
175	177	218	225	68.9	70.3	2.10	2.24	4.53	4.65	24.6	25.0	65.7	68.6	4.2	4.5	
	172		215		68.2		2.07		4.26		25.0		69.8		4.6	566
175	178	222	229	69.7	71.2	2.22	2.37	4.38	4.50	25.3	25.6	72.6	75.4	4.9	5.2	
	172		206		66.8		1.92		4.33		25.1		70.1		4.5	567
174	176	213	220	68.3	69.8	2.07	2.22	4.46	4.59	25.5	25.9	73.0	75.9	4.8	5.1	
	173		210		67.6		1.84		4.49		24.2		63.5		4.5	80
175	177	215	220	68.8	70.0	1.97	2.10	4.58	4.67	24.5	24.8	65.5	67.5	4.7	4.9	
	173		206		66.6		1.85		4.49		24.4		63.7		4.5	82
176	179	213	220	68.0	69.4	2.00	2.15	4.60	4.71	24.7	25.0	66.0	68.3	4.7	4.9	
	172		190		64.9		1.44		4.66		23.8		57.6		4.2	84
174	176	197	204	66.3	67.7	1.59	1.74	4.77	4.88	24.1	24.4	60.0	62.4	4.5	4.8	
	173		204		66.9		1.74		4.58		24.1		58.5		4.2	322
175	177	211	218	68.3	69.7	1.89	2.04	4.71	4.84	24.5	24.9	61.4	64.3	4.5	4.8	
	174		208		67.7		1.87		4.52		25.2		71.5		5.9	337
176	178	215	222	69.2	70.7	2.02	2.17	4.65	4.78	25.6	26.0	74.4	77.3	6.1	6.3	
	169		222		69.6		2.39		4.51		25.6		77.4		6.1	225
172	175	227	232	70.8	72.0	2.53	2.67	4.60	4.69	25.9	26.2	79.4	81.4	6.3	6.5	
	174		203		65.8		2.08		4.66		25.5		77.2		6.1	86
177	180	210	217	67.3	68.8	2.23	2.38	4.77	4.88	25.9	26.3	79.7	82.2	6.3	6.5	
	169		228		70.4		2.22		4.31		24.5		66.8		4.3	88
171	173	232	236	71.4	72.4	2.35	2.48	4.39	4.47	24.8	25.1	68.5	70.2	4.5	4.7	
	171		221		69.8		2.14		4.32		25.0		69.8		4.3	252
174	177	227	233	71.0	72.2	2.27	2.40	4.41	4.50	25.3	25.6	71.9	74.0	4.5	4.7	
	169		226		70.0		2.13		4.34		25.2		70.3		5.0	275
171	173	233	240	71.5	73.0	2.28	2.43	4.46	4.58	25.5	25.8	73.0	75.7	5.2	5.4	
	173		210		66.6		1.99		4.43		25.0		72.4		4.2	316
175	177	217	224	68.0	69.4	2.14	2.29	4.56	4.69	25.4	25.8	75.4	78.4	4.5	4.8	
	177		210		67.7		1.98		4.43		24.7		66.9		4.0	313
179	181	217	224	69.1	70.5	2.13	2.28	4.56	4.69	25.1	25.5	69.8	72.7	4.3	4.6	
	172		226		70.7		2.23		4.25		24.5		67.2		4.2	92
174	176	230	234	71.7	72.7	2.35	2.47	4.33	4.41	24.8	25.1	69.0	70.8	4.4	4.6	
	170		221		70.2		2.09		4.27		24.1		62.3		4.4	93
173	176	228	235	71.7	73.2	2.24	2.39	4.39	4.51	24.4	24.7	65.0	67.7	4.7	5.0	
	169		221		69.9		2.02		4.33		24.5		63.6		5.0	321
172	175	227	233	71.3	72.7	2.17	2.32	4.44	4.55	24.8	25.1	66.1	68.6	5.3	5.6	

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY GROWING (%) RE-GRESSED MEAN	MORTALITY GROWING (%) 80%* CONF. LIMITS	MORTALITY LAYING (%) RE-GRESSED MEAN	MORTALITY LAYING (%) 80%* CONF. LIMITS
276	Hubbard Farms Walpole, New Hampshire	Syn. x NH BX	Comet	16 11	35.0	3.2	2.7 3.6	11.3	10.5 12.1
240	Hy-Line Poultry Farm Des Moines, Iowa	INX	Hy-Line 934-H	81 37	55.5	2.3	1.9 2.7	8.1	7.4 8.8
314	Hy-Line Poultry Farm Des Moines, Iowa	INX	Hy-Line 934-F	10 7	54.5	3.2	2.8 3.6	9.9	9.2 10.6
286	Hy-Line Poultry Farm Des Moines, Iowa	INX	Hy-Line 950	4 2	54.8	3.0	2.7 3.3	10.6	10.0 11.2
101	Ideal Hatchery & Poultry Fr. Cameron, Texas	WL SX	Ideal H-3-W	59 26	38.3	3.5	3.1 4.0	10.6	9.8 11.4
303	Ideal Hatchery & Poultry Fr. Cameron, Texas	WL SX	Ideal Cross	8 4	36.8	2.7	2.4 3.1	11.5	10.8 12.2
285	Kahn, Max Toms River, New Jersey	WL SX	Kahn	2 1	35.5	3.2	3.0 3.5	10.8	10.3 11.3
108	Kerr, Dr., Hatcheries Minneota, Minnesota	WL IN	Kerr 409 C	6 4	43.7	3.1	2.8 3.5	11.0	10.4 11.7
109	Keystone Poultry Br. Farm Terre Hill, Pennsylvania	WL SX	Park's Keystone	4 2	39.0	3.4	3.0 3.7	10.2	9.6 10.8
110	Kimber Farms, Inc., Fremont, California	WL SX	Kimber K 137	67 32	44.6	2.6	2.2 3.0	8.9	8.1 9.6
111	Kimber Farms, Inc., Fremont, California	WL SX	Kimber K 141	6 2	44.0	2.5	2.3 2.9	10.4	9.7 11.0
112	Kimber Farms, Inc., Fremont, California	WL SX	Kimber K 155	24 9	43.7	2.9	2.5 3.3	9.7	8.9 10.4
312	Kingstowne Poultry Farm Kingston, Rhode Island	WR x RIR BX	Silver King Cross	1 1	35.0	3.0	2.8 3.2	10.5	10.1 10.8
227	Klongland Hatchery Stoughton, Wisconsin	CG x WL BX	K Cross	2 1	35.0	3.0	2.7 3.3	9.9	9.4 10.3
528	Lambert, P. B., Farm Bright, Ontario	WL SX	M & H	4 2	39.5	3.4	3.1 3.7	10.1	9.5 10.7
557	Law, H. A., Hatfield Pt., New Brunswick	RIR x (RIRxLS)	Law	2 1	31.0	3.4	3.2 3.7	10.3	9.8 10.7
562	Law, H. A., Hatfield Pt., New Brunswick	WL x (LSxRIR)	Law	2 1	31.0	3.3	3.0 3.5	10.9	10.5 11.4
117	Lawton, A. C. & Sons Foxboro, Massachusetts	RIR x WPR BX	Buff Sex Link	12 9	35.3	3.4	3.0 3.8	8.7	8.0 9.4
235	Leader, Guy A. & Sons, Inc., York, Pennsylvania	WL SX	Leader 8X	3 2	36.3	3.8	3.5 4.2	11.4	10.8 11.9
278	Leader, Guy A. & Sons, Inc., York, Pennsylvania	WL SX	Leader 10X	3 3	38.8	3.3	3.0 3.6	11.3	10.7 11.9
229	Leader, Guy A. & Sons, Inc., York, Pennsylvania	WL SX	Leader 14X	2 2	38.0	3.2	3.0 3.5	10.5	10.1 11.0

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	168		216		68.8		2.10		4.54		24.5		66.8		5.4	276
171	174	221	226	70.0	71.2	2.24	2.38	4.64	4.74	24.8	25.1	68.8	70.8	5.6	5.8	
	168		235		72.2		2.31		4.13		24.7		69.4		4.1	240
170	172	238	241	73.1	74.0	2.43	2.55	4.21	4.29	25.0	25.3	71.0	72.6	4.2	4.3	
	170		216		68.2		2.01		4.20		25.1		70.2		4.2	314
172	174	223	230	69.5	70.8	2.16	2.31	4.31	4.42	25.4	25.7	72.6	75.0	4.4	4.6	
	170		212		67.6		1.94		4.25		24.7		68.5		4.2	286
172	174	219	226	69.1	70.6	2.10	2.26	4.37	4.49	25.1	25.5	71.2	73.9	4.4	4.6	
	175		214		68.8		2.06		4.36		24.9		71.2		4.2	101
177	179	218	222	69.8	70.8	2.19	2.32	4.44	4.52	25.2	25.5	73.0	74.8	4.4	4.6	
	176		213		69.6		2.03		4.36		24.6		67.8		4.3	303
178	180	219	225	71.0	72.4	2.18	2.33	4.47	4.58	24.9	25.2	70.2	72.6	4.5	4.7	
	174		213		68.6		1.99		4.42		24.9		69.6		4.9	285
177	180	221	229	70.1	71.6	2.14	2.29	4.55	4.68	25.2	25.5	72.5	75.4	5.1	5.3	
	168		222		70.8		2.12		4.23		24.6		66.0		4.4	108
171	174	229	236	72.3	73.8	2.27	2.42	4.35	4.47	24.9	25.2	68.5	71.0	4.6	4.8	
	175		203		66.9		1.88		4.46		24.8		70.4		4.4	109
178	181	210	217	68.4	69.9	2.04	2.20	4.58	4.70	25.1	25.4	73.1	75.8	4.6	4.8	
	169		224		69.6		2.17		4.30		24.9		71.1		4.3	110
171	173	228	232	70.5	71.4	2.29	2.41	4.38	4.46	25.1	25.3	72.8	74.5	4.5	4.7	
	171		216		68.2		2.03		4.29		24.3		66.0		4.3	111
173	175	223	230	69.7	71.2	2.18	2.33	4.42	4.55	24.6	24.9	68.6	71.2	4.5	4.7	
	167		226		70.0		2.14		4.35		24.7		67.3		4.5	112
169	171	231	236	71.2	72.4	2.27	2.40	4.44	4.53	24.9	25.1	69.3	71.3	4.7	4.9	
	175		197		64.8		1.61		4.76		24.4		65.4		5.6	312
177	179	204	211	66.1	67.4	1.76	1.91	4.89	5.02	24.8	25.2	68.3	71.2	5.9	6.2	
	171		217		68.1		2.09		4.29		24.7		67.1		5.0	227
173	175	225	233	69.6	71.1	2.25	2.41	4.42	4.55	25.1	25.5	70.0	72.9	5.2	5.4	
	179		208		68.7		1.92		4.37		24.4		67.6		4.0	528
181	183	215	222	70.2	71.7	2.07	2.22	4.49	4.61	24.8	25.2	70.3	73.0	4.2	4.4	
	172		197		64.4		1.75		4.75		24.8		68.1		5.3	557
175	178	204	211	65.9	67.4	1.90	2.05	4.88	5.01	25.2	25.6	71.0	73.9	5.5	5.7	
	171		211		67.9		2.03		4.41		24.7		69.5		4.8	562
173	175	218	225	69.4	70.9	2.18	2.33	4.54	4.67	25.1	25.5	72.4	75.3	5.1	5.4	
	177		207		66.4		2.14		4.65		26.0		82.1		6.0	117
179	181	213	219	67.6	68.8	2.28	2.42	4.75	4.85	26.3	26.6	84.2	86.3	6.2	6.4	
	175		208		68.8		1.93		4.45		24.7		69.4		4.4	235
178	181	216	224	70.3	71.8	2.09	2.25	4.57	4.69	25.1	25.5	72.2	75.0	4.7	5.0	
	175		206		68.1		1.88		4.51		25.0		72.2		4.4	278
177	179	213	220	69.6	71.1	2.03	2.18	4.63	4.75	25.4	25.8	74.9	77.6	4.6	4.8	
	175		213		68.6		1.96		4.47		24.7		68.6		4.2	229
177	179	221	229	70.1	71.6	2.11	2.26	4.60	4.73	25.1	25.5	71.4	74.2	4.5	4.8	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
568	Lone Pine Farm Berwick, Nova Scotia	(RIRxLS) x WL	Lone Pine 161	2 1	35.0	3.3	3.0 3.5	10.4	10.0 10.9
551	MacDonald, C. E., Cody's, New Brunswick	RIR x (LSxRIR)	MacDonald	4 1	28.0	3.3	3.0 3.7	11.1	10.5 11.7
569	Macdonald & Vriends Covehead Road, P. E. I.	WL SX	Mac 300	2 1	37.0	3.2	2.9 3.4	10.6	10.1 11.0
539	Manitoba ROP Hatchery Winnipeg, Manitoba	WL SX	Keyling 110A	6 2	41.0	3.6	3.2 4.0	10.5	9.8 11.1
320	Mathews Poultry Farm Burlington, Wisconsin	WL SX	M-138 F	1 1	41.0	3.2	3.0 3.4	10.5	10.2 10.8
549	McIsaac, J. Donald East Florenceville, N. B.	WL SX	Electric	4 1	33.0	3.4	3.1 3.7	11.3	10.7 11.9
560	McIsaac, J. Donald East Florenceville, N. B.	RIR x (LSxNH)	McIsaac's 110	2 1	28.0	3.3	3.0 3.5	10.7	10.3 11.1
574	Meridian Plty. Fr. & Hatchery Cloverdale, B. C.	WL SX	Meridian Leghorn	2 1	30.0	3.5	3.3 3.8	11.6	11.1 12.1
555	Nelson, George F., Truro, Nova Scotia	RIR x LS BX	Red x Sussex	4 1	28.0	3.0	2.7 3.3	9.6	9.1 10.1
139	Niles Poultry Br. Farm Niles, California	WL SX	Niles	6 2	34.5	3.2	2.9 3.6	10.3	9.6 10.9
140	Niles Poultry Br. Farm Niles, California	CG x WL BX	Commercial	6 2	34.5	2.9	2.6 3.2	10.8	10.2 11.5
526	Noble Bros., Orangeville, Ontario	WL SX	Noble Bros. N-60	4 1	33.0	3.2	2.8 3.5	11.7	11.1 12.3
302	Norco Poultry Br. Farm Norco, California	WL PS	Grade AA	6 2	35.0	2.8	2.5 3.1	10.6	10.0 11.3
37	No. Cent. Reg. Plty. Br. Lab. Lafayette, Indiana	WL PS	Reg. Cornell Contr.	44 22	41.7	3.6	3.1 4.1	10.7	9.9 11.6
157	No. Cent. Reg. Plty. Br. Lab. Lafayette, Indiana	RIR x WL BX	Reg. Red x Cornell	6 2	39.5	3.0	2.7 3.3	10.4	9.7 11.0
257	No. Cent. Reg. Plty. Br. Lab. Lafayette, Indiana	RIR PS	Reg. Red Control	2 1	37.5	3.3	3.1 3.6	10.5	10.1 11.0
151	Peerless Hatchery Spencer, Iowa	WL SX	Peerless 262	8 3	39.0	3.2	2.8 3.6	12.1	11.3 12.8
152	Penna. Fr. Bureau Hatchery Harrisburg, Pennsylvania	WL SX	LSC 55	5 4	42.5	3.8	3.4 4.2	11.2	10.5 11.8
234	Penna. Fr. Bureau Hatchery Harrisburg, Pennsylvania	WL SX	LSC 60	2 1	42.5	3.1	2.9 3.4	10.2	9.7 10.6
301	Pollard Farms Tustin, California	Syn. x WL BX	Silver X Leghorn	6 2	36.0	3.0	2.7 3.3	10.5	9.8 11.1
159	Randall Hatchery & Br. Farm Montclair, California	CG x WL BX	Randall Gray x Leg.	6 2	35.0	3.1	2.8 3.5	10.5	9.9 11.2

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION				INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
		HEN HOUSED (No.)		HEN DAY (%)												
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	174		211		67.4		1.91		4.63		24.9		71.0		5.0	568
176	178	218	225	68.8	70.2	2.06	2.21	4.76	4.89	25.3	25.7	74.0	77.0	5.3	5.6	
	174		188		63.5		1.59		4.99		24.9		68.9		5.6	551
176	178	196	204	65.0	66.5	1.74	1.89	5.12	5.25	25.2	25.5	71.8	74.7	5.9	6.2	
	173		211		67.2		1.88		4.50		24.1		63.4		4.3	569
175	177	218	225	68.7	70.2	2.03	2.18	4.63	4.76	24.4	24.7	66.3	69.2	4.6	4.9	
	170		208		66.4		1.89		4.41		24.7		68.7		4.5	539
173	176	215	222	67.9	69.4	2.04	2.19	4.53	4.65	25.0	25.3	71.4	74.1	4.7	4.9	
	174		211		67.6		1.91		4.48		24.4		64.7		4.5	320
176	178	218	225	69.0	70.4	2.05	2.19	4.60	4.72	24.7	25.0	67.6	70.5	4.8	5.1	
	174		200		66.5		1.73		4.60		24.5		65.7		4.5	549
176	178	207	214	68.0	69.5	1.88	2.03	4.73	4.86	24.9	25.3	68.6	71.5	4.8	5.1	
	175		198		65.6		1.78		4.84		24.9		71.4		5.5	560
177	179	205	212	67.1	68.6	1.93	2.08	4.97	5.10	25.3	25.7	74.4	77.4	5.8	6.1	
	173		199		68.0		1.82		4.35		24.1		63.4		3.4	574
175	177	207	215	69.4	70.8	1.97	2.12	4.48	4.61	24.4	24.7	66.3	69.2	3.7	4.0	
	170		198		63.8		1.82		4.98		25.5		73.9		6.6	555
172	174	205	212	65.3	66.8	1.97	2.12	5.11	5.24	25.8	26.1	76.8	79.7	6.9	7.2	
	172		208		66.9		1.93		4.42		24.5		66.7		4.2	139
175	178	215	222	68.4	69.9	2.09	2.25	4.54	4.66	24.8	25.1	69.3	71.9	4.4	4.6	
	170		214		68.7		1.92		4.48		24.8		67.6		5.1	140
172	174	221	228	70.2	71.7	2.07	2.22	4.61	4.74	25.1	25.4	70.2	72.8	5.3	5.5	
	174		201		66.4		1.79		4.49		24.1		61.6		4.4	526
176	178	208	215	67.9	69.4	1.95	2.11	4.62	4.75	24.4	24.7	64.4	67.2	4.7	5.0	
	170		215		68.4		1.86		4.54		24.9		68.3		4.9	302
172	174	222	229	69.9	71.4	2.02	2.18	4.67	4.80	25.2	25.5	71.0	73.7	5.2	5.5	
	175		208		66.8		1.71		4.60		23.8		57.2		4.5	37
177	179	213	218	67.8	68.8	1.84	1.97	4.68	4.76	24.1	24.4	59.0	60.8	4.6	4.7	
	174		201		65.7		1.56		4.81		24.2		62.8		5.4	157
176	178	208	215	67.2	68.7	1.71	1.86	4.94	5.07	24.5	24.8	65.4	68.0	5.7	6.0	
	175		198		64.8		1.50		5.05		24.3		66.0		5.7	257
177	179	206	214	66.3	67.8	1.66	1.82	5.18	5.31	24.7	25.1	68.9	71.8	6.0	6.3	
	174		214		69.7		1.96		4.46		24.2		64.5		4.8	151
177	180	221	228	71.1	72.5	2.11	2.26	4.58	4.70	24.5	24.8	67.0	69.5	5.0	5.2	
	172		211		68.0		1.95		4.37		24.4		65.8		4.2	152
175	178	218	225	69.4	70.8	2.10	2.25	4.48	4.59	24.7	25.0	68.2	70.6	4.4	4.6	
	171		223		69.5		2.15		4.29		24.6		67.0		4.3	234
174	177	230	237	71.0	72.5	2.30	2.45	4.42	4.55	25.0	25.4	69.9	72.8	4.6	4.9	
	170		214		68.4		1.83		4.53		24.4		64.7		5.2	301
172	174	220	226	69.9	71.4	1.99	2.15	4.65	4.77	24.7	25.0	67.3	69.9	5.4	5.6	
	170		220		69.4		2.04		4.40		24.5		65.5		4.9	159
172	174	227	234	70.9	72.4	2.20	2.36	4.53	4.66	24.8	25.1	68.2	70.9	5.2	5.5	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
160	Rapp Leghorn Farm Farmingdale, New Jersey	WL SX	Rapp Linecross	30 14	38.4	3.3	2.9 3.8	10.8	10.0 11.6
530	Raynor, Ralph Charlottetown, P. E. I.	WL SX	Raynor R-60	8 2	39.5	2.9	2.5 3.3	11.3	10.6 12.0
165	Richardson Poultry Br. Farm Redlands, California	WA BX	Commercial MWA	6 2	43.5	3.8	3.4 4.2	10.3	9.7 11.0
334	Richardson Poultry Br. Farm Redlands, California	CG x WL BX	Richardson 724	3 2	37.0	3.2	3.0 3.5	11.8	11.3 12.4
249	Riddle Spring Poultry Farm Manchester, New Hampshire	RIR x WR BX	Super-Triway	6 4	30.0	3.2	2.8 3.5	9.4	8.8 10.0
323	Riverside Hatchery Knoxville, Tennessee	WL SX	Riverside SX	2 1	36.0	3.1	2.9 3.3	10.9	10.4 11.4
510	St. Augustin Coop. Hatchery St. Augustin, Quebec	WL SX	Corvette	14 4	38.4	3.5	3.1 4.0	11.8	11.0 12.6
542	Ste. Martine Coop. Hatchery Ste. Martine, Quebec	WL SX	Chateauguay 83	4 1	35.0	3.5	3.2 3.9	11.2	10.6 11.8
531	Scattered Acres Hatchery Hanover, Ontario	WL x (BLxLS)	Hanover 30	4 1	33.5	3.7	3.4 4.1	12.2	11.6 12.8
295	Schaible, Louis D., Shiloh, New Jersey	WL SX	K Cross	12 6	36.5	3.4	3.0 3.9	9.7	9.0 10.4
180	Schuyler Poultry Farms LeRoy, New York	WL SX	EGG Champs	2 2	40.0	3.1	2.9 3.4	10.2	9.8 10.7
324	Schuyler Poultry Farms LeRoy, New York	WL SX	Egg Lines	2 1	40.0	3.2	3.0 3.4	10.3	9.9 10.8
547	Searle, Clarence Centre Napan, N. B.	RIR x CR BX	Red Cross	4 1	30.0	3.0	2.7 3.3	10.7	10.1 11.2
181	Shaver Poultry Br. Farm Galt, Ontario	WL SX	Starcross 288	53 24	41.4	3.0	2.6 3.5	10.2	9.4 11.0
315	Shaver Poultry Br. Farm Galt, Ontario	WL SX	Starcross 292	1 1	41.0	3.2	3.0 3.5	10.4	10.0 10.7
328	Shaver Poultry Br. Farm Galt, Ontario	Syn. x WL BX	Starcross 444	3 3	40.5	3.1	2.8 3.4	10.9	10.4 11.4
333	Shaver Poultry Br. Farm Galt, Ontario	RIR SX	Starcross 555	2 1	43.0	3.3	3.0 3.5	10.7	10.3 11.2
572	Smyth, James Nanaimo, British Columbia	WL SX	501 x 547	2 1	36.0	3.3	3.0 3.6	10.7	10.3 11.2
533	Starline Breeders Hatchery Saskatoon, Saskatchewan	CG x WL BX	Pearlette	6 2	38.0	3.2	2.8 3.5	10.2	9.6 10.9
186	Stever Hatchery Huntingdon, Pennsylvania	WL SX	SC-300	6 4	37.5	2.9	2.6 3.2	10.2	9.6 10.8
190	Stone's Poultry Farm Dinuba, California	WL SX	Stone's H 56	8 3	37.0	2.7	2.4 3.1	9.1	8.4 9.7

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	175		214		69.2		2.02		4.41		24.7		68.6		4.2	160
178	181	218	222	70.3	71.4	2.15	2.28	4.50	4.59	24.9	25.1	70.6	72.6	4.4	4.6	
	176		202		67.2		1.79		4.47		24.3		64.6		4.3	530
178	180	209	216	68.7	70.2	1.95	2.11	4.59	4.71	24.6	24.9	67.3	70.0	4.5	4.7	
	172		210		67.3		1.83		4.50		24.4		65.9		4.6	165
174	176	217	224	68.8	70.3	1.98	2.13	4.62	4.74	24.7	25.0	68.5	71.1	4.8	5.0	
	173		208		68.6		1.82		4.53		23.9		59.8		5.3	334
175	177	216	224	70.1	71.6	1.97	2.12	4.66	4.79	24.3	24.7	62.7	65.6	5.5	5.7	
	173		207		66.0		2.20		4.62		25.7		78.1		6.3	249
175	177	214	221	67.4	68.8	2.35	2.50	4.74	4.86	26.0	26.3	80.6	83.1	6.5	6.7	
	174		210		68.2		1.98		4.48		24.2		68.1		4.2	323
177	180	217	224	69.7	71.2	2.13	2.28	4.61	4.74	24.6	25.0	71.0	73.9	4.5	4.8	
	173		189		63.0		1.66		4.63		25.3		74.2		4.4	510
176	179	195	201	64.4	65.8	1.80	1.94	4.74	4.85	25.6	25.9	76.6	79.0	4.6	4.8	
	173		199		65.9		1.79		4.50		24.7		67.5		4.4	542
176	179	206	213	67.4	68.9	1.95	2.11	4.63	4.76	25.0	25.3	70.4	73.3	4.7	5.0	
	173		188		64.3		1.66		4.61		24.4		64.8		4.3	531
175	177	196	204	65.8	67.3	1.81	1.96	4.73	4.85	24.8	25.2	67.7	70.6	4.6	4.9	
	175		213		67.2		2.05		4.41		24.8		70.5		4.1	295
178	181	218	223	68.5	69.8	2.19	2.33	4.51	4.61	25.0	25.2	72.7	74.9	4.3	4.5	
	174		216		68.3		2.07		4.34		24.5		67.3		4.2	180
177	180	223	230	69.8	71.3	2.23	2.39	4.47	4.60	24.9	25.3	70.1	72.9	4.5	4.8	
	175		212		68.0		2.00		4.31		24.8		69.5		4.2	324
177	179	220	228	69.5	71.0	2.15	2.30	4.44	4.57	25.1	25.4	72.4	75.3	4.5	4.8	
	175		187		62.8		1.62		4.87		25.3		73.4		5.2	547
178	181	194	201	64.3	65.8	1.78	1.94	5.00	5.13	25.7	26.1	76.3	79.2	5.5	5.8	
	170		230		73.1		2.28		4.28		24.8		70.3		4.6	181
173	176	234	238	74.1	75.1	2.40	2.52	4.37	4.46	25.1	25.4	72.1	73.9	4.8	5.0	
	172		217		68.7		2.05		4.38		24.5		67.1		4.4	315
174	176	224	231	70.1	71.5	2.19	2.33	4.51	4.64	24.9	25.3	70.1	73.1	4.8	5.2	
	169		213		68.1		1.97		4.33		24.7		67.6		4.9	328
172	175	220	227	69.6	71.1	2.13	2.29	4.46	4.59	25.0	25.3	70.3	73.0	5.1	5.3	
	174		197		64.7		1.78		4.70		24.9		71.1		5.7	333
176	178	204	211	66.2	67.7	1.92	2.06	4.83	4.96	25.2	25.5	74.0	76.9	5.9	6.1	
	172		208		65.7		1.50		4.84		23.0		50.6		4.5	572
175	178	216	224	67.1	68.5	1.65	1.80	4.97	5.10	23.4	23.8	53.5	56.4	4.8	5.1	
	169		215		67.9		1.94		4.44		24.3		61.6		5.2	533
172	175	222	229	69.4	70.9	2.10	2.26	4.56	4.68	24.6	24.9	64.3	67.0	5.5	5.8	
	173		211		66.9		2.01		4.33		24.0		59.2		3.8	186
175	177	217	223	68.3	69.7	2.16	2.31	4.45	4.57	24.3	24.6	61.8	64.4	4.1	4.4	
	168		228		70.6		2.24		4.26		24.6		67.5		4.5	190
171	174	235	242	72.1	73.6	2.39	2.54	4.37	4.48	24.9	25.2	70.0	72.5	4.7	4.9	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

STOCK CODE	BREEDER'S NAME AND ADDRESS	BREEDING	STRAIN OR TRADENAME	NO. PENS / NO. LOCATIONS	AVG. CHICK PRICE (¢)	MORTALITY			
						GROWING (%)		LAYING (%)	
						RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
336	Sturtevant Farms, Inc., Halifax, Massachusetts	RIR x WPR BX	Golden Sex Link	3 / 3	33.0	3.3	3.0 3.6	9.9	9.4 10.4
196	Sunnyside Hatchery Watertown, Wisconsin	CG x WL BX	Wisco White	2 / 1	36.0	3.2	2.9 3.5	10.8	10.4 11.3
199	Townline Poultry Farm Zeeland, Michigan	WL SX	SC 30	5 / 3	36.2	3.5	3.1 3.9	11.2	10.6 11.9
556	Triska, Eric Edmonton, Alberta	WL SX	Belmont 292	10 / 3	36.0	3.4	3.0 3.8	12.2	11.4 13.0
534	Triska, Eric Edmonton, Alberta	WL SX	Belmont 292A	4 / 1	35.0	3.0	2.8 3.3	10.8	10.3 11.4
231	Truway Farms East Berlin, Pennsylvania	WL SX	Trubred #21	3 / 2	36.0	3.5	3.2 3.9	11.3	10.7 11.8
325	Univ. of Tennessee Knoxville, Tennessee	WL PS	Pure Line	2 / 1	42.0	3.3	3.1 3.5	11.0	10.6 11.5
202	Vancrest Farms Hyde Park, New York	RIR x NH BX	All Red	2 / 2	62.0	3.4	3.1 3.7	12.0	11.5 12.5
261	Ward Poultry Farm Independence, Iowa	WL x Syn. BX	Wardcrost 356	5 / 3	38.3	3.2	2.8 3.5	12.0	11.3 12.6
42	Warren, J. J., Inc. North Brookfield, Mass.	WL SX	Warren Darby DX	19 / 11	40.7	3.5	3.1 4.0	10.4	9.6 11.2
250	Warren, J. J., Inc., North Brookfield, Mass.	WL x Syn. BX	Warren J. J.	8 / 3	39.3	2.8	2.5 3.2	10.3	9.6 11.0
208	Warren, J. J., Inc., North Brookfield, Mass.	RIR x RIW BX	Sex-Sal-Link	14 / 8	40.8	3.1	2.7 3.6	10.7	9.9 11.5
305	Warren, J. J., Inc. North Brookfield, Mass.	RIR x RIW BX	Sex-Sal-Link-F	8 / 7	42.0	2.8	2.4 3.2	9.3	8.7 10.0
210	Webster Poultry Farms Auburn, New York	RIR PS	Certified	2 / 2	37.0	3.2	2.9 3.4	11.5	11.0 12.0
319	Welp's Breeding Farm Bancroft, Iowa	MSC	Welp Line 542	1 / 1	39.0	3.3	3.1 3.5	10.6	10.3 11.0
290	Welp's Breeding Farm Bancroft, Iowa	WL SX	Welp Line 937	33 / 18	41.3	3.2	2.8 3.7	9.7	8.9 10.5
298	White Farms Corona, California	CG x WL BX	White Cross	6 / 2	30.0	3.4	3.0 3.7	10.5	9.9 11.2
565	White, Lorne Port Hope, Ontario	WL SX	Whitecross 60	2 / 1	32.0	3.3	3.1 3.6	11.1	10.6 11.5
280	Wolf's Hatchery Bloomsburg, Pennsylvania	WL SX	Wolf's B-J	2 / 1	37.5	2.8	2.6 3.1	10.6	10.2 11.1
219	Wood Poultry Breeding Farm Pomona, California	AW BX	Austra-White	6 / 2	42.5	2.8	2.5 3.1	10.5	9.8 11.2

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

AGE AT 50% PRODUCTION (Days)		EGG PRODUCTION: HEN HOUSED (No.)		EGG PRODUCTION: HEN DAY (%)		INCOME OVER FEED AND CHICK COST ($)		FEED PER 24 OZ. OF EGGS PRODUCED (lbs.)		EGG WEIGHT (oz.)		LARGE AND EXTRA LARGE EGGS (%)		BODY WEIGHT (lbs.)		STOCK CODE
RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	
	174		209		67.0		2.18		4.41		25.4		75.5		5.4	336
176	178	216	223	68.5	70.0	2.34	2.50	4.54	4.67	25.7	26.0	78.2	80.9	5.7	6.0	
	172		204		66.6		1.84		4.48		24.6		66.5		5.0	196
174	176	211	218	68.1	69.6	1.99	2.14	4.61	4.74	25.0	25.4	69.4	72.3	5.3	5.6	
	175		209		69.0		1.97		4.34		24.5		67.1		4.2	199
177	179	216	223	70.5	72.0	2.12	2.27	4.46	4.58	24.8	25.1	69.6	72.1	4.4	4.6	
	174		204		68.0		1.84		4.55		24.4		66.0		4.7	556
177	180	210	216	69.4	70.8	1.98	2.12	4.66	4.77	24.7	25.0	68.5	71.0	4.9	5.1	
	173		204		67.2		1.82		4.58		24.6		66.7		4.3	534
176	179	212	220	68.7	70.2	1.98	2.14	4.70	4.82	24.9	25.2	69.6	72.5	4.5	4.7	
	176		194		64.5		1.79		4.45		24.9		71.5		3.9	231
179	182	202	210	66.0	67.5	1.94	2.09	4.57	4.69	25.2	25.5	74.2	76.9	4.1	4.3	
	172		201		65.5		1.76		4.58		24.0		60.7		4.3	325
174	176	209	217	67.0	68.5	1.91	2.06	4.71	4.84	24.3	24.6	63.6	66.5	4.6	4.9	
	177		187		65.5		1.55		4.77		25.1		72.1		5.5	202
180	183	194	201	67.0	68.5	1.70	1.85	4.90	5.03	25.5	25.9	74.9	77.7	5.7	5.9	
	174		199		65.8		1.75		4.49		24.7		68.3		4.5	261
176	178	206	213	67.2	68.6	1.90	2.05	4.62	4.75	25.0	25.3	70.9	73.5	4.7	4.9	
	180		211		68.9		2.01		4.41		24.7		69.3		4.2	42
182	184	216	221	70.1	71.3	2.14	2.27	4.50	4.59	25.0	25.3	71.2	73.1	4.4	4.6	
	175		216		68.9		2.02		4.30		24.7		67.5		4.3	250
178	181	222	228	70.3	71.7	2.17	2.32	4.42	4.54	25.0	25.3	70.0	72.5	4.5	4.7	
	175		201		66.3		1.97		4.58		24.9		69.6		5.2	208
177	179	207	213	67.6	68.9	2.11	2.25	4.68	4.78	25.2	25.5	71.8	74.0	5.4	5.6	
	176		209		66.5		2.16		4.43		25.5		77.3		5.3	305
178	180	216	223	67.9	69.3	2.31	2.46	4.54	4.65	25.8	26.1	79.7	82.1	5.5	5.7	
	175		193		65.1		1.64		4.70		24.6		66.7		5.1	210
177	179	200	207	66.6	68.1	1.80	1.96	4.83	4.96	24.9	25.2	69.5	72.3	5.4	5.7	
	173		209		67.6		1.94		4.37		24.7		66.6		4.2	319
175	177	216	223	69.0	70.4	2.09	2.24	4.50	4.63	25.0	25.3	69.6	72.6	4.5	4.8	
	173		226		71.5		2.25		4.13		24.7		68.9		4.0	290
175	177	230	234	72.5	73.5	2.39	2.53	4.23	4.33	24.9	25.1	70.8	72.7	4.2	4.4	
	169		222		70.2		1.98		4.43		24.9		67.4		5.0	298
172	175	229	236	71.7	73.2	2.13	2.28	4.56	4.69	25.2	25.5	70.1	72.8	5.3	5.6	
	177		199		67.7		1.83		4.43		24.5		68.6		3.8	565
180	183	206	213	69.2	70.7	1.98	2.13	4.56	4.69	24.9	25.3	71.6	74.6	4.1	4.4	
	173		204		66.4		1.83		4.42		24.8		68.8		4.2	280
176	179	212	220	67.8	69.2	1.99	2.15	4.55	4.68	25.1	25.4	71.7	74.6	4.4	4.6	
	170		209		66.9		1.76		4.53		24.3		63.9		4.8	219
173	176	216	223	68.4	69.9	1.91	2.06	4.65	4.77	24.6	24.9	66.6	69.3	5.0	5.2	

* *If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS (*1/1000 inch*)	
				1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)			
		RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
3	LX 330	77.6	76.7 78.5	1.0	0.8 1.3	1.7	1.5 2.0	.6	0.2 1.0	1.1	0.5 2.0	14.1	13.9 14.3
317	LX 360	76.9	75.5 78.3	1.0	0.9 1.2	1.9	1.8 2.0	.6	0.2 1.3	.9	0.2 2.3	13.9	13.7 14.1
5	Ames 424	79.0	78.2 79.8	.8	0.6 1.0	1.8	1.6 2.1	.8	0.4 1.1	1.1	0.6 1.8	14.2	14.0 14.4
7	Ames 434 R	76.7	75.7 77.7	.8	0.6 1.0	1.8	1.6 2.1	.7	0.3 1.2	1.3	0.6 2.2	14.2	14.0 14.4
8	Ames 505	76.6	75.7 77.5	1.0	0.8 1.3	2.7	2.4 3.0	10.2	8.8 11.8	29.4	26.4 32.4	14.2	14.0 14.4
578	Andrews Leghorn	73.3	72.0 74.6	1.0	0.8 1.2	2.1	1.9 2.2	.9	0.3 1.8	3.6	1.9 5.9	14.1	13.9 14.3
537	Polka Dot	77.6	76.5 78.7	1.0	0.8 1.3	1.8	1.6 2.1	.8	0.4 1.4	2.0	1.1 3.3	14.1	13.9 14.3
145	A. R. I. Random Bred	77.7	76.6 78.8	1.3	1.0 1.5	2.1	1.9 2.3	.8	0.3 1.6	1.6	0.6 3.1	14.1	13.8 14.4
570	Kentville R. B.	76.3	75.0 77.6	1.3	1.1 1.6	2.0	1.9 2.2	.7	0.2 1.5	1.3	0.4 2.7	14.1	13.9 14.3
10	Anthony	78.7	77.8 79.6	1.3	1.0 1.6	2.1	1.8 2.4	.2	0.0 .5	.9	0.4 1.6	13.8	13.6 14.0
573	Life Line A	76.9	75.6 78.2	1.0	0.8 1.2	2.0	1.9 2.2	1.2	0.5 2.1	1.7	0.6 3.4	14.4	14.1 14.7
579	Life Line B	75.2	73.8 76.6	1.1	0.9 1.3	2.0	1.9 2.2	.9	0.3 1.8	1.3	0.3 2.7	14.1	13.8 14.4
138	Arbor Acres Queen	78.7	77.9 79.5	1.4	1.2 1.6	2.0	1.7 2.2	.4	0.2 .7	.8	0.4 1.3	14.1	13.9 14.3
332	Ava Certified	77.4	76.0 78.8	1.1	0.9 1.3	2.0	1.8 2.1	.8	0.2 1.5	.9	0.2 2.3	13.8	13.5 14.1
232	Avery Flock Mating	70.9	69.9 71.9	1.6	1.3 2.0	2.4	2.1 2.7	3.2	2.3 4.2	6.7	5.1 8.6	13.5	13.2 13.8
307	Babcock B-300	75.7	74.8 76.6	1.6	1.3 1.8	2.2	1.9 2.4	.8	0.4 1.1	1.3	0.7 2.2	14.2	14.0 14.4
306	Babcock B-370	72.3	71.2 73.4	1.1	0.8 1.3	1.9	1.7 2.2	1.2	0.6 1.8	1.3	0.6 2.4	13.7	13.5 13.9
577	Balakshin Type B	75.2	73.8 76.6	1.1	0.9 1.3	1.9	1.8 2.1	.7	0.2 1.4	1.3	0.3 2.7	14.1	13.8 14.4
505	Balakshin Leghorn	77.7	76.6 78.8	1.1	0.9 1.4	2.1	1.9 2.4	1.1	0.5 1.8	2.3	1.2 3.7	14.2	13.9 14.5
293	Ball 551 A	76.4	75.2 77.6	1.2	0.9 1.5	2.2	1.9 2.4	.6	0.2 1.2	1.1	0.4 2.3	14.1	13.8 14.4
318	Baum B x W	76.4	75.0 77.8	1.1	0.9 1.3	2.0	1.9 2.1	.6	0.2 1.3	.9	0.2 2.3	14.0	13.7 14.3

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (*1/1000 inch*)	
		RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
20	Beamsdale 66		76.5		1.0		1.9		0.2		0.2		13.9
		77.6	78.7	1.3	1.6	2.1	2.3	.6	1.2	.7	1.5	14.1	14.3
22	Booth Line 351		74.1		0.9		1.8		0.3		0.4		13.8
		75.4	76.7	1.1	1.4	2.0	2.1	.9	1.7	1.4	2.8	14.1	14.4
329	Booth Line 352		75.0		1.0		1.9		0.2		0.2		13.9
		76.4	77.8	1.1	1.3	2.1	2.2	.8	1.5	.9	2.3	14.2	14.5
230	Money Maker #1		75.7		0.9		1.8		0.3		0.3		14.0
		76.5	77.3	1.1	1.4	2.1	2.4	.5	.8	.6	1.2	14.2	14.4
308	Brender Beauty		75.6		0.7		1.7		0.1		0.1		14.0
		76.7	77.8	1.0	1.3	1.9	2.2	.4	.9	.6	1.3	14.2	14.4
506	Kanaka White		73.1		0.7		2.0		0.8		4.2		14.0
		74.2	75.3	.9	1.2	2.2	2.4	1.5	2.4	6.1	8.2	14.2	14.4
571	Monarch		70.6		0.8		1.7		0.2		2.4		13.9
		71.9	73.2	1.0	1.2	1.9	2.0	.7	1.4	4.2	6.7	14.2	14.5
26	Graycie		72.2		0.7		1.7		---		---		13.6
		73.3	74.4	.9	1.1	1.9	2.1	---	---	---	---	13.8	14.0
561	Burpee's #31		76.6		0.7		1.6		1.3		3.1		14.2
		78.0	79.4	.9	1.1	1.7	1.8	2.3	3.6	5.3	8.0	14.5	14.8
544	Burpee's #321		74.6		0.5		1.6		1.0		2.3		14.1
		75.7	76.8	.7	.9	1.8	2.0	1.7	2.6	3.8	5.6	14.3	14.5
283	Cameron #924		77.3		0.8		1.8		0.5		1.4		13.9
		78.6	79.9	1.0	1.2	1.9	2.1	1.2	2.1	2.8	4.8	14.1	14.3
30	Carey Nicks		78.4		0.7		1.7		0.1		0.2		14.0
		79.6	80.8	.9	1.1	1.9	2.1	.5	1.1	.8	1.8	14.3	14.6
292	Carey E.J.'s		78.0		0.9		1.9		0.2		0.3		13.9
		79.2	80.4	1.2	1.4	2.1	2.3	.7	1.4	1.0	2.3	14.2	14.5
31	Hi-Cash		74.7		1.5		1.8		0.3		0.9		14.0
		75.6	76.5	1.8	2.2	2.0	2.3	.6	1.0	1.5	2.3	14.2	14.4
304	Astronauts		74.8		0.8		1.8		0.2		0.4		14.0
		76.1	77.4	1.0	1.2	2.0	2.1	.7	1.4	1.3	2.7	14.3	14.6
32	EGGSecutive		74.0		0.7		1.8		---		---		13.5
		75.1	76.2	1.0	1.2	2.0	2.3	---	---	---	---	13.8	14.1
558	Clark's #57		76.3		0.5		1.7		0.9		3.0		14.0
		77.6	78.9	.7	.9	1.9	2.1	1.7	2.7	4.9	7.1	14.3	14.6
508	Paymaster 101		75.1		0.5		1.9		8.6		12.6		13.6
		76.3	77.5	.7	.9	2.0	2.2	10.7	13.0	16.0	19.8	13.8	14.0
289	True-Line 365 B		76.6		1.7		1.8		0.3		0.3		14.0
		77.5	78.4	2.1	2.5	2.1	2.4	.6	1.0	.8	1.4	14.2	14.4
330	True-Line #142		73.2		0.9		1.9		0.2		0.2		13.5
		74.6	76.0	1.1	1.3	2.0	2.1	.8	1.5	.9	2.3	13.8	14.1
309	Davis Combiner		75.0		0.7		1.8		3.4		7.7		13.6
		76.1	77.2	1.0	1.2	2.0	2.2	4.8	6.5	10.6	13.8	13.9	14.2

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All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS				MEAT SPOTS				SHELL THICKNESS (*1/1000 inch*)	
				1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)		1/8 INCH OR MORE (%)		LESS THAN 1/8 INCH (%)			
		REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS
48	DeKalb 131	76.7	75.8 77.6	1.1	0.9 1.3	1.6	1.4 1.9	1.1	0.8 1.6	1.7	1.1 2.5	13.9	13.7 14.1
277	DeKalb 151	79.3	78.5 80.1	.9	0.7 1.2	1.6	1.3 1.8	.5	0.2 .8	.8	0.3 1.4	14.1	13.9 14.3
52	Demler Kross	74.4	73.5 75.3	1.2	0.9 1.5	2.0	1.8 2.3	.5	0.2 .9	.8	0.3 1.6	13.8	13.6 14.0
310	Demler Regal	76.5	75.6 77.4	1.0	0.8 1.2	1.9	1.6 2.1	.4	0.2 .7	1.1	0.5 1.9	14.1	13.9 14.3
326	DeWitt's HD 300	75.8	74.4 77.2	1.1	0.9 1.3	2.2	2.0 2.3	2.0	1.1 3.1	1.1	0.3 2.6	14.0	13.8 14.2
563	de Zeeuw 621	76.5	75.2 77.8	1.0	0.9 1.3	2.0	1.9 2.2	.7	0.2 1.5	1.1	0.2 2.4	14.2	13.9 14.5
514	de Zeeuw 752	76.1	75.1 77.1	1.2	1.0 1.5	2.2	1.9 2.4	.8	0.4 1.4	1.0	0.4 2.0	14.1	13.9 14.3
271	Dryden SX 60	76.0	75.0 77.0	1.3	1.0 1.6	2.1	1.9 2.3	1.0	0.4 1.8	1.1	0.3 2.4	14.1	13.9 14.3
515	Early Hi Layers	75.4	74.1 76.7	1.0	0.8 1.2	1.9	1.8 2.1	2.8	1.7 4.2	3.6	1.9 5.8	14.4	14.2 14.6
327	Eby's #681 Hybrids	74.9	73.7 76.1	1.0	0.8 1.3	1.9	1.7 2.1	.3	0.1 .8	.9	0.2 1.9	13.9	13.7 14.1
564	Starline	75.4	74.0 76.8	1.5	1.2 1.7	2.1	2.0 2.3	.9	0.3 1.7	2.2	0.9 4.0	14.1	13.9 14.3
59	Erath Strain X	76.0	74.8 77.2	1.4	1.1 1.7	2.1	1.8 2.3	.4	0.1 .9	1.3	0.5 2.4	14.0	13.7 14.3
517	Echo Leghorns	76.8	75.7 77.9	1.4	1.1 1.8	2.0	1.8 2.3	1.1	0.5 1.8	2.4	1.3 3.8	14.0	13.7 14.3
311	Evans Maxilay	76.6	75.4 77.8	1.8	1.4 2.1	2.0	1.8 2.3	.8	0.4 1.4	1.5	0.6 2.6	14.1	13.8 14.4
518	Fisher 103	76.4	75.3 77.5	1.1	0.8 1.4	2.0	1.8 2.3	.4	0.1 .8	.8	0.2 1.8	14.2	13.9 14.5
60	FX 100	77.3	76.1 78.5	1.2	0.9 1.4	2.0	1.8 2.2	.4	0.1 1.0	.7	0.1 1.7	14.5	14.2 14.8
246	Forsgate F160	79.5	78.4 80.6	1.1	0.8 1.4	1.9	1.6 2.1	.6	0.2 1.2	1.2	0.4 2.2	13.9	13.7 14.1
65	Garber Grey Leghorn	74.9	73.9 75.9	1.0	0.7 1.2	1.9	1.7 2.1	.7	0.2 1.4	1.0	0.3 2.3	14.0	13.8 14.2
66	Garber G200	80.2	79.2 81.2	.7	0.5 .9	1.5	1.3 1.7	.5	0.2 1.0	.8	0.2 1.7	14.5	14.3 14.7
69	Garrison Golden Sex Link	79.3	78.0 80.6	1.1	0.9 1.3	2.2	2.0 2.4	2.2	1.3 3.4	8.9	6.2 12.1	14.3	14.1 14.5
70	Gasson's G33	78.4	77.3 79.5	1.1	0.9 1.4	2.0	1.8 2.3	.3	0.1 .8	1.2	0.5 2.2	14.2	14.0 14.4

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (Haugh units)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (1/1000 inch)	
		REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS
72	Ghostley Pearl		77.9		1.1		1.5		0.2		0.5		14.1
		78.7	79.5	1.3	1.5	1.7	1.9	.4	.6	.9	1.5	14.3	14.5
335	Goertz		76.8		0.9		1.8		----		----		13.9
		78.1	79.4	1.2	1.4	2.0	2.2	---	----	---	----	14.1	14.3
559	Goodine		74.3		0.9		1.8		2.9		5.2		13.8
		75.6	76.9	1.1	1.3	1.9	2.1	4.2	5.9	7.9	11.0	14.1	14.4
331	Great Plains		73.6		1.1		1.9		0.2		0.2		13.5
		75.0	76.4	1.3	1.4	2.0	2.2	.8	1.5	.9	2.3	13.8	14.1
566	Corvette A1		76.1		1.0		1.8		0.4		1.5		13.8
		77.3	78.5	1.3	1.5	2.0	2.2	.9	1.6	2.8	4.6	14.0	14.2
567	Oka 93		74.6		0.9		1.8		0.6		1.2		13.7
		75.9	77.2	1.1	1.3	2.0	2.1	1.3	2.2	2.6	4.5	13.9	14.1
80	Criss Cross H-25		76.4		1.0		1.9		0.3		0.5		13.9
		77.3	78.2	1.2	1.5	2.1	2.4	.7	1.2	1.1	1.9	14.1	14.3
82	Criss Cross 61		76.1		0.9		1.8		0.5		0.5		13.8
		77.2	78.3	1.2	1.5	2.0	2.3	1.0	1.6	1.2	2.1	14.1	14.4
84	Super Nick		77.0		1.5		2.0		0.2		0.4		13.9
		78.1	79.2	1.8	2.2	2.3	2.5	.6	1.2	1.1	2.2	14.1	14.3
322	Super Nick A		75.7		1.0		1.9		0.7		0.2		13.7
		77.1	78.5	1.2	1.4	2.0	2.2	1.5	2.5	1.1	2.6	13.9	14.1
337	Harco Group I		74.7		0.8		1.7		5.0		20.7		13.4
		76.0	77.3	.9	1.1	1.9	2.0	6.8	8.7	25.1	29.9	13.7	14.0
225	Harco Sex Link		75.8		0.6		1.9		7.1		16.7		13.5
		76.7	77.6	.8	1.0	2.2	2.5	8.4	9.8	19.1	21.7	13.8	14.1
86	Hardy Sex Link		73.9		1.4		1.9		2.5		16.9		13.9
		74.9	75.9	1.7	2.1	2.2	2.4	3.5	4.7	19.9	23.0	14.2	14.5
88	H & N Nick Chick		78.2		0.9		1.8		0.3		0.4		13.9
		78.9	79.6	1.1	1.4	2.0	2.3	.6	.9	.8	1.3	14.1	14.3
252	H & N Mark II		78.0		0.9		1.6		0.2		0.4		13.6
		78.8	79.6	1.1	1.4	1.8	2.1	.4	.8	.9	1.5	13.9	14.0
275	H & N Breed Cross		73.4		0.7		1.7		----		----		13.7
		74.5	75.6	1.0	1.2	1.9	2.1	---	----	---	----	13.9	14.1
316	H-K-Cross		74.3		1.2		1.7		0.3		1.7		13.9
		75.7	77.1	1.4	1.6	1.8	1.9	.9	1.8	3.4	5.7	14.2	14.5
313	Hill Top 285-B		76.8		1.0		1.8		0.3		0.5		13.9
		78.2	79.6	1.1	1.3	2.0	2.1	.9	1.8	1.5	3.2	14.1	14.3
92	Honegger Layer		75.7		0.9		1.5		0.1		0.3		14.0
		76.5	77.3	1.1	1.4	1.8	2.0	.3	.6	.7	1.3	14.1	14.2
93	Honegger Layer #62		76.8		1.0		1.7		0.1		0.2		13.4
		78.0	79.2	1.2	1.5	2.0	2.2	.4	.9	.8	1.8	13.6	13.8
321	Honegger H-80		72.9		0.8		1.8		0.7		1.1		13.5
		73.9	74.9	1.0	1.3	2.0	2.3	1.3	1.9	2.0	3.2	13.8	14.1

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

716-429 O - 63 - 4

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (*1/1000 inch*)	
		RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
276	Hubbard Comet		75.6		0.5		1.4		5.6		18.7		13.1
		76.5	77.4	.7	1.0	1.7	1.9	6.7	8.0	21.2	23.9	13.3	13.5
240	Hy-Line 934-H		72.2		0.7		1.2		0.0		0.2		13.8
		72.9	73.6	.8	1.0	1.4	1.6	.1	.2	.4	.8	14.0	14.2
314	Hy-Line 934-F		74.2		0.8		1.5		0.1		0.2		13.9
		75.3	76.4	1.1	1.3	1.8	2.0	.4	.9	.8	1.6	14.1	14.3
286	Hy-Line 950		74.6		0.7		1.7		0.0		0.2		13.8
		75.7	76.8	1.0	1.2	1.9	2.1	.2	.6	.7	1.6	14.0	14.2
101	Ideal H-3-W		75.1		1.6		1.9		0.2		0.5		13.9
		75.9	76.7	1.9	2.2	2.1	2.4	.4	.7	.9	1.4	14.1	14.3
303	Ideal Cross		74.2		0.8		2.2		0.0		0.3		13.7
		75.3	76.4	1.0	1.3	2.5	2.8	.2	.6	.9	1.7	13.9	14.1
285	Kahn		75.1		0.9		1.8		0.1		0.5		13.6
		76.4	77.7	1.2	1.4	2.0	2.1	.4	1.0	1.5	3.1	13.9	14.2
108	Kerr 409 C		77.3		0.6		1.8		0.1		0.0		13.8
		78.4	79.5	.8	1.1	2.1	2.3	.5	1.1	.3	1.0	14.1	14.4
109	Park's Keystone		76.3		0.9		1.8		0.2		0.4		13.7
		77.4	78.5	1.1	1.4	2.0	2.2	.5	1.2	1.2	2.5	13.9	14.1
110	Kimber K137		79.3		1.0		1.3		0.3		0.9		14.3
		80.1	80.9	1.2	1.4	1.5	1.7	.5	.8	1.4	2.1	14.5	14.7
111	Kimber K141		75.0		1.1		1.9		----		----		14.4
		76.1	77.2	1.4	1.7	2.1	2.3	---	----	---	----	14.6	14.8
112	Kimber K155		78.0		0.7		1.6		0.7		1.0		14.1
		78.8	79.6	.9	1.2	1.9	2.2	1.1	1.5	1.7	2.5	14.3	14.5
312	Silver King Cross		76.7		0.9		1.9		2.8		13.4		14.0
		78.1	79.5	1.0	1.2	2.0	2.1	4.2	5.8	17.5	22.0	14.3	14.6
227	Klongland K Cross		72.6		0.6		1.8		0.4		0.8		13.5
		73.9	75.2	.8	1.0	1.9	2.1	.9	1.8	2.1	3.8	13.7	13.9
528	Lambert M & H		75.9		0.6		1.6		0.1		0.3		13.7
		77.1	78.3	.8	1.1	1.8	2.0	.5	1.1	1.0	2.0	14.0	14.3
557	Law RIR x (RIR x LS)		75.5		1.0		2.0		3.3		9.5		13.7
		76.8	78.1	1.2	1.5	2.2	2.3	4.8	6.5	13.0	16.8	14.0	14.3
562	Law WL(LS x RIR)		74.0		0.9		1.7		1.3		2.1		13.9
		75.4	76.8	1.0	1.3	1.8	1.9	2.3	3.6	4.0	6.3	14.1	14.3
117	Lawton Buff Sex Link		75.6		0.8		1.8		8.4		17.7		13.6
		76.5	77.4	1.1	1.3	2.1	2.3	9.7	11.2	20.2	22.9	13.8	14.0
235	Leader 8X		77.4		0.8		1.8		0.1		0.4		13.7
		78.7	80.0	1.0	1.2	2.0	2.2	.5	1.1	1.2	2.4	13.9	14.1
278	Leader 10X		76.8		1.0		1.8		0.1		0.2		13.6
		78.0	79.2	1.2	1.5	2.0	2.2	.5	1.1	.8	1.8	13.9	14.2
229	Leader 14X		78.3		1.1		1.7		0.9		0.8		14.0
		79.6	80.9	1.3	1.6	1.9	2.1	1.6	2.7	1.8	3.3	14.3	14.6

** If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (*1/1000 inch*)	
		RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
568	Lone Pine 161		74.0		0.8		1.8		2.0		1.9		14.1
		75.3	76.6	1.0	1.2	2.0	2.1	3.2	4.6	3.6	5.8	14.3	14.5
551	MacDonald		73.7		1.2		2.1		2.4		8.2		13.7
		75.0	76.3	1.4	1.6	2.3	2.5	3.7	5.2	11.2	14.7	14.0	14.3
569	Mac 300		76.9		0.8		1.8		0.1		1.1		14.2
		78.2	79.5	1.0	1.2	1.9	2.1	.5	1.1	2.5	4.5	14.5	14.8
539	Keyling 110 A		77.0		1.0		1.9		0.3		0.4		14.0
		78.2	79.4	1.2	1.5	2.1	2.3	.8	1.4	1.1	2.2	14.2	14.4
320	M-138F		77.0		1.0		1.9		0.3		0.6		13.6
		78.4	79.8	1.1	1.3	2.0	2.2	.9	1.7	1.7	3.5	13.8	14.0
549	Electric		75.5		0.6		1.7		1.0		2.9		13.9
		76.8	78.1	.7	.9	1.9	2.0	1.9	3.0	4.9	7.4	14.2	14.5
560	McIsaac's 110		75.0		1.1		2.1		2.2		7.4		13.8
		76.4	77.8	1.3	1.6	2.3	2.4	3.4	4.9	10.5	14.1	14.0	14.2
574	Meridian Leghorn		75.8		1.0		1.8		0.3		1.0		14.1
		77.1	78.4	1.2	1.4	1.9	2.1	.9	1.8	2.4	4.3	14.4	14.7
555	Nelson Red x Sussex		75.2		1.2		2.3		3.6		13.1		13.8
		76.5	77.8	1.4	1.6	2.5	2.7	5.1	6.8	16.7	20.7	14.1	14.4
139	Niles		76.7		0.9		1.7		----		----		14.2
		77.8	78.9	1.1	1.4	1.9	2.1	---	----	---	----	14.4	14.6
140	Niles Commercial		73.2		0.8		1.8		----		----		13.5
		74.3	75.4	1.0	1.3	2.0	2.2	---	----	---	----	13.7	13.9
526	Noble N-60		75.0		1.0		1.8		0.4		0.8		14.0
		76.3	77.6	1.2	1.5	2.0	2.2	1.0	1.9	2.0	3.6	14.3	14.6
302	Norco Grade AA		76.9		1.0		1.8		----		----		13.8
		78.0	79.1	1.2	1.5	2.0	2.2	---	----	---	----	14.0	14.2
37	Reg. Cornell Control		75.9		1.6		2.1		0.3		0.6		13.8
		76.7	77.5	1.8	2.2	2.4	2.7	.6	.9	1.1	1.8	14.0	14.2
157	Reg. Red x Cornell		74.5		0.8		1.7		----		----		13.8
		75.6	76.7	1.1	1.3	1.9	2.2	---	----	---	----	14.0	14.2
257	Reg. Red Control		75.4		0.9		1.9		5.1		10.1		13.4
		76.7	78.0	1.1	1.3	2.0	2.2	6.8	8.8	13.5	17.2	13.7	14.0
151	Peerless 262		76.2		0.7		1.7		0.4		0.5		13.9
		77.3	78.4	.9	1.1	1.9	2.2	1.0	1.9	1.5	3.1	14.1	14.3
152	LSC 55		79.0		0.7		1.7		0.6		0.4		13.7
		80.1	81.2	.9	1.2	1.9	2.1	1.2	2.0	1.1	2.1	14.0	14.3
234	LSC 60		78.9		0.8		1.7		0.2		0.3		13.7
		80.2	81.5	1.0	1.2	1.8	2.0	.7	1.5	1.2	2.6	14.0	14.3
301	Pollard Silver x Leghorn	76.6	75.5 77.7	1.2	1.0 1.5	2.0	1.8 2.2	---	---- ----	---	---- ----	14.0	13.7 14.3
159	Randall Gray x Leghorn	76.3	75.2 77.4	1.1	0.9 1.4	2.0	1.8 2.2	---	---- ----	---	---- ----	14.0	13.7 14.3

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All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (Haugh units)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (1/1000 inch)	
		REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS	REGRESSED MEAN	80%* CONF. LIMITS
160	Rapp Linecross		75.0		1.1		1.6		0.3		0.5		13.9
		75.9	76.8	1.4	1.7	1.8	2.1	.6	1.0	1.0	1.7	14.1	14.3
530	Raynor R-60		74.5		0.7		1.7		0.9		2.0		14.0
		75.6	76.7	.9	1.1	1.9	2.1	1.7	2.6	3.4	5.1	14.3	14.6
165	Richardson Commercial MWA		71.9		0.7		1.7		----		----		14.3
		73.0	74.1	.9	1.1	2.0	2.2	---	----	---	----	14.5	14.7
334	Richardson 724		70.9		0.9		2.0		----		----		13.3
		72.1	73.3	1.2	1.4	2.2	2.4	---	----	---	----	13.6	13.9
249	Super-Triway		75.5		0.4		1.6		5.0		11.8		14.0
		76.6	77.7	.6	.8	1.8	2.0	6.4	7.9	14.4	17.2	14.3	14.6
323	Riverside SX		75.5		1.2		1.9		0.3		0.5		14.0
		76.8	78.1	1.5	1.7	2.0	2.2	.8	1.6	1.5	3.0	14.2	14.4
510	St. Augustin Corvette		77.4		0.8		1.7		0.2		0.6		13.6
		78.4	79.4	1.0	1.3	2.0	2.2	.6	1.1	1.3	2.2	13.8	14.0
542	Chateauguay 83		76.9		0.6		1.7		0.2		0.6		13.7
		78.1	79.3	.8	1.0	1.9	2.1	.6	1.3	1.6	3.1	13.9	14.1
531	Hanover 30		75.9		0.9		1.8		0.5		1.3		14.0
		77.1	78.3	1.1	1.3	2.0	2.1	1.1	2.0	2.6	4.4	14.2	14.4
295	Schaible K Cross		77.6		1.0		1.6		0.4		0.1		13.9
		78.5	79.4	1.3	1.6	1.9	2.1	.8	1.3	.5	1.1	14.1	14.3
180	EGG Champs		73.6		0.9		1.6		0.2		0.3		13.8
		74.9	76.2	1.1	1.4	1.8	2.0	.6	1.3	1.0	2.3	14.0	14.2
324	Schuyler Egg Lines		75.7		1.0		1.7		0.3		0.4		14.0
		77.1	78.5	1.2	1.4	1.8	2.0	.8	1.6	1.3	2.8	14.3	14.6
547	Searle's Red Cross		75.7		1.0		2.1		3.2		11.0		13.7
		77.0	78.3	1.3	1.5	2.3	2.5	4.7	6.3	14.4	18.2	14.0	14.3
181	Starcross 288		74.9		1.1		1.8		0.5		1.1		14.0
		75.7	76.5	1.3	1.6	2.1	2.4	.8	1.1	1.7	2.5	14.2	14.4
315	Starcross 292		74.7		1.0		1.9		0.3		0.5		13.9
		76.1	77.5	1.1	1.3	2.0	2.1	.9	1.8	1.5	3.2	14.2	14.5
328	Starcross 444		73.4		0.6		2.0		0.2		0.3		13.5
		74.6	75.8	.8	1.1	2.2	2.4	.5	1.1	1.0	2.0	13.8	14.1
333	Starcross 555		74.8		1.1		2.1		3.8		7.4		13.4
		76.2	77.6	1.3	1.5	2.3	2.5	5.4	7.2	10.5	14.1	13.6	13.8
572	Smyth 501 x 547		74.1		1.1		2.1		0.2		0.6		13.9
		75.5	76.9	1.3	1.5	2.3	2.4	.7	1.4	1.7	3.4	14.1	14.3
533	Pearlette		72.6		0.9		1.7		0.4		1.4		14.0
		73.7	74.8	1.1	1.4	1.8	2.0	1.0	1.7	2.6	4.2	14.2	14.4
186	Stever SC 300		74.6		0.6		1.8		0.2		0.3		13.9
		75.8	77.0	.8	1.1	2.0	2.3	.5	1.0	.9	1.9	14.2	14.5
190	Stone H 56		76.9		0.7		1.7		0.1		0.6		14.1
		77.9	78.9	.9	1.2	1.9	2.1	.5	1.2	1.7	3.3	14.3	14.5

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All Stocks Entered, with Regressed Means and 80% Confidence Limits for each Trait *(Continued)*

STOCK CODE	STRAIN OR TRADENAME	ALBUMEN QUALITY (*Haugh units*)		BLOOD SPOTS 1/8 INCH OR MORE (%)		BLOOD SPOTS LESS THAN 1/8 INCH (%)		MEAT SPOTS 1/8 INCH OR MORE (%)		MEAT SPOTS LESS THAN 1/8 INCH (%)		SHELL THICKNESS (*1/1000 inch*)	
		RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS	RE-GRESSED MEAN	80%* CONF. LIMITS
336	Sturtevant Golden Sex Link	77.1	75.8 78.4	.7	0.5 .9	1.8	1.6 2.0	3.7	2.5 5.1	5.7	3.8 8.0	14.1	13.8 14.4
196	Wisco White	73.3	72.0 74.6	1.0	0.8 1.2	1.9	1.8 2.1	.8	0.3 1.5	1.2	0.4 2.7	14.1	13.8 14.4
199	Townline SC 30	77.7	76.6 78.8	1.4	1.1 1.7	2.2	2.0 2.4	.7	0.3 1.3	1.4	0.7 2.6	14.1	13.9 14.3
556	Belmont 292	76.2	75.2 77.2	1.4	1.1 1.7	2.0	1.8 2.2	.8	0.4 1.4	2.4	1.3 3.7	14.1	13.9 14.3
534	Belmont 292 A	75.2	74.0 76.4	1.2	1.0 1.5	2.0	1.8 2.2	.5	0.1 1.2	1.3	0.4 2.7	14.4	14.1 14.7
231	Trubred #21	78.2	76.9 79.5	1.0	0.8 1.3	2.0	1.8 2.2	.5	0.1 1.1	.8	0.2 1.8	14.2	14.0 14.4
325	Univ. of Tenn. Pure Line	78.5	77.2 79.8	1.3	1.1 1.6	2.1	2.0 2.3	1.0	0.4 1.9	2.2	0.9 4.1	14.1	13.8 14.4
202	Vancrest All Red	80.1	78.8 81.4	1.0	0.8 1.2	1.9	1.7 2.0	5.6	4.0 7.4	14.8	11.1 19.0	13.7	13.4 14.0
261	Wardcrost 356	75.4	74.3 76.5	.7	0.5 1.0	1.8	1.6 2.0	1.0	0.4 1.8	1.5	0.5 2.9	13.9	13.7 14.1
42	Warren Darby DX	76.8	76.0 77.6	1.9	1.5 2.2	2.2	1.9 2.5	.4	0.2 .7	.9	0.4 1.5	14.2	14.0 14.4
250	Warren JJ	74.4	73.3 75.5	1.3	1.0 1.6	1.9	1.7 2.2	.7	0.2 1.5	1.2	0.3 2.6	14.3	14.1 14.5
208	Warren Sex-Sal-Link	75.5	74.5 76.5	.6	0.4 .8	1.4	1.2 1.7	6.3	5.0 7.7	19.0	16.1 22.1	13.6	13.4 13.8
305	Warren Sex-Sal-Link-F	77.3	76.2 78.4	.6	0.4 .8	1.6	1.4 1.8	5.5	4.4 6.8	15.3	12.7 18.0	13.7	13.5 13.9
210	Webster Certified	78.5	77.2 79.8	.8	0.6 1.0	1.8	1.6 2.0	6.6	4.9 8.6	15.5	11.6 19.7	13.7	13.5 13.9
319	Welp Line 542	75.6	74.2 77.0	1.0	0.9 1.2	1.9	1.7 2.0	1.1	0.5 2.0	.9	0.1 2.2	14.0	13.7 14.3
290	Welp Line 937	76.3	75.5 77.1	1.4	1.1 1.7	1.9	1.7 2.2	.6	0.3 1.0	.7	0.3 1.3	13.9	13.7 14.1
298	White Cross	76.3	75.2 77.4	.8	0.6 1.0	2.0	1.8 2.2	---	---- ----	---	---- ----	13.5	13.2 13.8
565	Whitecross 60	76.7	75.4 78.0	1.0	0.8 1.3	2.0	1.9 2.2	1.1	0.5 2.0	1.6	0.5 3.2	14.2	14.0 14.4
280	Wolf's B-J	77.5	76.2 78.8	.8	0.6 1.0	2.0	1.8 2.1	.7	0.2 1.5	1.2	0.3 2.6	14.0	13.7 14.3
219	Wood Austra-White	77.5	76.4 78.6	.5	0.4 .7	1.6	1.5 1.8	---	---- ----	---	---- ----	14.0	13.8 14.2

**If the confidence limits for two regressed means overlap, the two means are not significantly different at the 5% level.*

Stocks Entered in 1962-63 Random Sample Egg Production Tests
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	N. C.	Penna	R. I.	Tenn.	Texas	Wisc.
3	Allstate	LX 330	4			X					X									X		X
317	Allstate	LX 360	1													X						
5	Ames	Ames 424	5			X			X			X						X			X	
7	Ames	Ames 434 R	2			X	X															
8	Ames	Ames 505	4										X	X			X		X			
578	Andrews	Andrews Leghorn	1		X																	
537	Andrews	Polka Dot	3	X	X		X															
145	Animal Res. Inst.	Random Bred	2				XX															
570	Animal Res. Inst.	Kentville R. B.	2				XX															
10	Anthony	Anthony	6									X			X	X		X	X			X
573	Appleby	Life Line A	1		X																	
579	Appleby	Life Line B	1		X																	
138	Arbor Acres	Arbor Acres Queen	12			X			X	X	X	X		X	X	X	X	X			X	X
332	Ava	Certified	1									X										
232	Avery	Flock Mating	2											X					X			
307	Babcock	Babcock B-300	16	X		X		XXX	X	X	X	X		X	X	X	X	X		X		X
306	Babcock	Babcock B-370	6			X		X				X						X	X	X		
577	Balakshin	Type B	1		X																	
505	Balakshin	Balakshin Leghorn	2		X		X															
293	Ball	551 A	3													X		X				X
318	Baum	B x W	1													X						
20	Beamsdale	Beamsdale 66	2									X					X					
22	Booth	Booth Line 351	1									X										
329	Booth	Booth Line 352	1									X										
230	Brender	Money Maker #1	6								X	X			X	X		X				X
308	Brender	Brender Beauty	4														X		X	X	X	
506	Buchanan	Kanaka White	2		X		X															
571	Buchanan	Monarch	1		X																	
26	Bundesen	Graycie	1			X																
561	Burpee	Burpee's #31	1										X									
544	Burpee	Burpee's #321	2				X						X									
283	Cameron	#924	1															X				
30	Carey	Carey Nicks	1													X						

Stocks Entered in 1962-63 Random Sample Egg Production Tests - Continued
(Listed Alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
292	Carey	E. J.'s	2									X						X				
31	Cashman	Hi-Cash	7		X						X	X					X	X		X	X	
304	Cashman	Astronauts	1									X										
32	Childers	EGGSecutive	1			X																
558	Clark	Clark's #57	2				X						X									
508	Clark	Paymaster 101	1				X															
289	Colonial	True-Line 365 B	6								X	X				X		X			X	X
330	Colonial	True-Line #142	1									X										
309	Davis	Davis Combiner	3			X												X	X			
48	DeKalb	DeKalb 131	10			X	X	X		X	X	X			X			X			X	X
277	DeKalb	DeKalb 151	9			X		X				X				X	X			X	XX	X
52	Demler	Demler Kross	4			X						X					X	X				
310	Demler	Demler Regal	11			X		X	X		X				X	X		X	X	X	X	X
326	DeWitt	DeWitt's HD 300	1																		X	
563	deZeeuw	deZeeuw 621	1	X																		
514	deZeeuw	deZeeuw 752	3	X	X		X															
271	Dryden	SX 60	1					X														
515	Early	Ei Layers	1				X															
327	Eby's	#681 Hybrids	3									X					X				X	
564	Elander	Starline	1				X															
59	Erath	Erath Str. X	1																		X	
517	Evans	Echo Leghorns	1				X															
311	Evans	Maxilay	5									X			X				X	X	X	
518	Fisher	103	2		X		X															
60	Fletcher	FX 100	1														X					
246	Forsgate	F 160	4			X									X	X		X				
65	Garber	Grey Leghorn	3			X						X						X				
66	Garber	G 200	5			X									X			X			X	X
69	Garrison	Golden Sex Link	1															X				
70	Gasson's	G 33	2									X										X
72	Ghostley	Ghostley Pearl	15			X	X	X	X	X	X	X		X		X	X	X	X	X	X	X
335	Goertz	Goertz	1			X																
559	Goodine	Goodine	1										X									
331	Great Plains	Great Plains	1									X										

Stocks Entered in 1962-63 Random Sample Egg Production Tests - Continued
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
566	Groupe Maska	Corvette A1	2		X		X															
567	Groupe Oka	Oka 93	1				X															
80	Hansen	Criss Cross H-25	5		X	X						X						X				X
82	Hansen	Criss Cross 61	2	X																X		
84	Hanson	Super Nick	2															X		X		
322	Hanson	Super Nick A	1												X							
337	Harco	Group I	1														X					
225	Harco	Sex Link	4											X		X		X	X			
86	Hardy	Sex Link	1											X								
88	H & N	H & N Nick Chick	16		X	X		XX	X	X		X			X	X	X	X		X	XXX	X
252	H & N	H & N Mark II	5					X			X	X								X		X
275	H & N	Breed Cross	1			X																
316	Heisey	H-K-Cross	1															X				
313	Hill Top	285-B	1															X				
92	Honegger	Honegger Layer	12		X	X		XX				X			X	X	X		X	X	X	X
93	Honegger	Honegger Layer #62	1									X										
321	Honegger	Honegger H-80	4					X						X						X		X
276	Hubbard	Comet	5			X								X		X		X	X			
240	Hy-Line	934-H	17			X	X	X	X	X	X	X		X	X	X	X		X	X	XXX	X
314	Hy-Line	934-F	6			X		X				X						X		X		X
286	Hy-Line	950	1									X										
101	Ideal	H-3-W	15			X		X	X		X	X			X	X	X	X	X	X	XXX	X
303	Ideal	Ideal Cross	2									X							X			
285	Kahn	Kahn	1												X							
108	Kerr	409 C	3			X						X										X
109	Keystone	Park's Keystone	2													X		X				
110	Kimber	K 137	15	X		X		X	X	X	X	X		X		X	X	X	X	X	X	X
111	Kimber	K 141	1			X																
112	Kimber	K 155	9		X			XX				X			X			X		X	X	X
312	Kingstown	Silver King Cross	1																X			
227	Klongland	K Cross	1																			X
528	Lambert	M & H	1				X															
557	Law	Law	1										X									

Stocks Entered in 1962-63 Random Sample Egg Production Tests - Continued
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
562	Law	Law	1										X									
117	Lawton	Buff Sex Link	5									X		X		X		X	X			
235	Leader	8X	2												X			X				
278	Leader	10X	1													X						
229	Leader	14X	1															X				
568	Lone Pine	Lone Pine 161	1				X															
551	MacDonald	MacDonald	1										X									
569	Macdonald & Vriends	Mac 300	1				X															
539	Manitoba ROP	Keyling 110 A	2	X			X															
320	Mathews	M-138F	1																			X
549	McIsaac	Electric	1										X									
560	McIsaac	McIsaac's 110	1										X									
574	Meridian	Meridian Leghorn	1		X																	
555	Nelson	Red x Sussex	1										X									
139	Niles	Niles	1			X																
140	Niles	Commercial	1			X																
526	Noble	N-60	1				X															
302	Norco	Grade AA	1			X																
37	No. Cen. Reg. Lab.	Reg. Cornell Contr.	8			X		X				X				X	X			X	X	X
157	No. Cen. Reg. Lab.	Reg. Red x Cornell	1			X																
257	No. Cen. Reg. Lab.	Reg. Red Control	1																X			
151	Peerless	Peerless 262	2			X						X										
152	Penna. Farm Bur.	LSC 55	3													X		X				X
234	Penna. Farm Bur.	LSC 60	1															X				
301	Pollard	Silver x Leghorn	1			X																
159	Randall	Gray x Leghorn	1			X																
160	Rapp	Rapp Linecross	6					X				X			X	X	X					X
530	Raynor	Raynor R-60	2				X						X									
165	Richardson	Commercial MWA	1			X																
334	Richardson	Richardson 724	1			X																
249	Riddle Springs	Super-Triway	1											X								
323	Riverside	Riverside SX	1																	X		
510	St. Augustin	Corvette	3	X			X						X									

Stocks Entered in 1962-63 Random Sample Egg Production Tests - Continued
(Listed alphabetically and showing tests entered)

Stock Code	Breeder	Stock	No. Entries	Alta.	Br. Col.	Calif.	Cent. Can.	Fla.	Iowa	Kansas	Minn.	Mo.	New Bruns.	N. H.	N. J.	C. N. Y.	N. C.	Penna.	R. I.	Tenn.	Texas	Wisc.
542	Ste. Martine	Chateauguay 83	1				X															
531	Scattered Acres	Hanover 30	1				X															
295	Schaible	K Cross	5												X	X		X		X	X	
180	Schuyler	EGG Champs	2													X		X				
324	Schuyler	Egg Lines	1																	X		
547	Searle	Searle's Red Cross	1										X									
181	Shaver	Starcross 288	14	X	X	X	X					X	X	X	X	X		X	X	X	X	X
315	Shaver	Starcross 292	1															X				
328	Shaver	Starcross 444	2								X	X										
333	Shaver	Starcross 555	1										X									
572	Smyth	501 x 547	1		X																	
533	Starline	Pearlette	1				X															
186	Stever	SC 300	4												X		X	X		X		
190	Stone	H 56	2			X		X														
336	Sturtevant	Golden Sex Link	1											X								
196	Sunnyside	Wisco White	1																			X
199	Townline	SC 30	3									X						X				X
556	Triska	Belmont 292	2	X			X															
534	Triska	Belmont 292 A	1	X																		
231	Truway	Trubred #21	1													X						
325	Univ. of Tenn.	Pure Line	1																	X		
202	Vancrest	All Red	1													X						
261	Ward	Wardcrost 356	2			X						X										
42	Warren	Warren Darby DX	7								X	X			X			X	X	X		X
250	Warren	Warren JJ	2			X												X				
208	Warren	Sex-Sal-Link	2			X																X
305	Warren	Sex-Sal-Link-F	5									X		X		X		X	X			
210	Webster	Certified	1													X						
319	Welp	Welp Line 542	1																			X
290	Welp	Welp Line 937	4			X			X	X												X
298	White	White Cross	1			X																
565	White	Whitecross 60	1				X															
280	Wolf's	B-J	1															X				
219	Wood	Austra-White	1			X																

This two-year summary includes performance data on 111 stocks that were entered in both the 1961-62 and 1962-63 tests and 56 stocks that were entered only in the 1962-63 tests. The 1961-62 tests were conducted at 49 different locations, and the 1962-63 tests were conducted at 30 locations. However, only 16 locations in 1961-62 and 19 locations in 1962-63 reported data on all of the 16 traits. Tests that were not included in the computation of the regressed means for each of the 16 traits are shown under the heading "Tests Not Included" in the tabulation on page 43.

The performance data were reported by replicate pens by those tests with replicates. In five tests where the replicate pens had less than 40 birds, the replicate data for each stock were combined, and the simple average of the replicates was used. This was done to more nearly equalize the variance among pens throughout all tests. The number of pens and the number of stocks tested at each location for the two years are given in the table on page 38.

The percentage data for both years for the six traits: growing mortality, laying mortality, large blood spots, small blood spots, large meat spots, and small meat spots were converted to angles with the arc sin transformation prior to analysis. However, the test-year adjustment factors, shown in the table on pages 38 through 42, and the regressed means and confidence limits, shown for these traits in the alphabetical listing of stocks, are given in percent.

The replicate data were analyzed by least-squares procedures to obtain the test-year adjustment factors found on pages 38 through 42, and the repeatability estimates and the correlations among pens within tests found on page 37. The test-year adjustment factors were then used to adjust the simple stock average for test and year effects. The adjusted stock averages (the least-squares stock means) were then regressed toward the overall mean ($\hat{\mu}$) to account for variations in number of tests entered, number of years entered and number of replicates per test. The formula used to compute the regressed means is:

$$\text{Regressed Mean} = \hat{\mu} + \frac{r_{2/C}}{1+(k_3-1)x_1+(k_1-k_3)x_2+(k_2-k_3)r_1+[(1/C)-k_1-k_2+k_3]r_2}(\hat{s})$$

where:

$\hat{\mu}$ = the average of the test and year adjusted stock means.

r_1 = repeatability within year.

r_2 = repeatability from year-to-year.

x_1 = the correlation among replicates within year and test.

x_2 = the correlation among pens of the same stock from year-to-year for the same test.

k_1 = an average of the number of pens per test (averaged over years).

k_2 = an average of the number of pens per year (averaged over tests).

k_3 = an average of the number of replicates per test-year subclass.

C = the diagonal inverse element for that stock. The reciprocal of C, i. e., $\frac{1}{C}$, is equal to nk_3 if the assumption is made that the adjustments for test-year effects are made without error; where n is the number of test-year subclasses in which that stock is entered.

$\hat{s}$ = the test-year adjusted stock average minus the overall mean ($\hat{\mu}$).

The correlations used in computing the regression coefficient were obtained from estimates of the variance components for stocks ($\hat{\sigma}^2_s$), the stock X test interaction ($\hat{\sigma}^2_{st}$), the stock X year interaction ($\hat{\sigma}^2_{sy}$) and the random error ($\hat{\sigma}^2_e$). The variance component estimates were obtained by equating the computed mean squares for these effects to their expectations. The mean square for stocks was adjusted for the test-year subclass effects and the mean squares for the stock X test interaction and the stock X year interaction were adjusted by least-squares procedures for the effects of stocks and the test-year subclasses. The three-factor interaction was assumed to be non-existent. Ratios of the variance component estimates that were used to compute the correlations are given below:

Correlation Among Replicates $= x_1 = \dfrac{\hat{\sigma}^2_s + \hat{\sigma}^2_{st} + \hat{\sigma}^2_{sy}}{\hat{\sigma}^2_s + \hat{\sigma}^2_{st} + \hat{\sigma}^2_{sy} + \hat{\sigma}^2_e}$

Correlation from Year-to-Year (same test) $= x_2 = \dfrac{\hat{\sigma}^2_s + \hat{\sigma}^2_{st}}{\hat{\sigma}^2_s + \hat{\sigma}^2_{st} + \hat{\sigma}^2_{sy} + \hat{\sigma}^2_e}$

Repeatability from Test-to-Test (within year) $= r_1 = \dfrac{\hat{\sigma}^2_s + \hat{\sigma}^2_{sy}}{\hat{\sigma}^2_s + \hat{\sigma}^2_{st} + \hat{\sigma}^2_{sy} + \hat{\sigma}^2_e}$

Repeatability from Test-to-Test (between year) $= r_2 = \dfrac{\hat{\sigma}^2_s}{\hat{\sigma}^2_s + \hat{\sigma}^2_{st} + \hat{\sigma}^2_{sy} + \hat{\sigma}^2_e}$

An approximate standard error (SE) was computed for each regressed mean as follows:

$$SE = b\sqrt{C(\hat{\sigma}^2_e + k_1\hat{\sigma}^2_{st} + k_2\hat{\sigma}^2_{sy})}$$

where b is the regression coefficient given above in the formula for the regressed mean. Confidence limits were then computed for each regressed mean as follows:

$$\text{Regressed Mean} \pm 1.3\ SE$$

The constant 1.3 was selected so that the probability of the confidence limits overlaping by chance alone between any two means would be about .03. This makes the tests of significance among regressed means almost comparable to using Duncan's range test at the .05 level of probability.

The following terms and definitions should be of help in interpreting the analytical procedures:

Overall Mean:	The average of the test-year adjusted means for all stocks. This estimates what the overall average would have been if all stocks had been entered in all tests in both years.
Range:	The range represents the difference between the expected maximum and minimum performance among the 167 stocks, based on the regressed means.
Test-Year Adjustment Factor:	The amount added to a given location in a given year to bring it to the average of all the location-year subclasses which had complete data. These factors were determined on an intra-stock basis with a least-squares analysis and they are given on pages 38 through 42.
Repeatability Within Year:	An intra-class correlation which measures the tendency for common stocks to rank the same from test-to-test within year. Theoretically, it can vary from 0.00 to 1.00.
Repeatability Between Years:	A correlation which measures the tendency for common stocks to rank the same from test-to-test from one year to another. The difference between the repeatability within year and repeatability between years indicates the relative importance of the stock X year interaction.
Correlation from Year-to-Year Within Tests:	A correlation which measures the tendency for common stocks to rank the same from year-to-year when tested at the same location. The difference between the repeatability between years and the correlation from year-to-year within tests indicates the relative importance of the stock X test interaction.
Correlation Among Replicates:	This correlation measures the repeatability among replicates of the same stock in the same test and year. The higher the correlation among replicates the less need there is for replication of stocks within test and year.
Confidence Limits:	The confidence limits for each regressed mean are computed so that the probability is about .80 that the "true" stock mean lies within the interval. They are presented in this report, however, for the purpose of providing approximate tests of significance for differences among stocks.

ANALYTICAL DATA FOR THE TRAITS MEASURED

Trait	Overall Means	Regressed Means		Repeatability		Correlations Within Test	
		Min.	Max.	Within Year (r_1)	Year-to-Year (r_2)	Among Replicates (x_1)	Year-to-Year (x_2)
Growing Mortality (%)	3.2	2.3	4.2	0.095	0.051	0.095	0.051
Laying Mortality (%)	10.6	8.1	13.0	.185	.167	.185	.167
Age at 50% Production	175	169	184	.491	.419	.664	.592
Hen-Housed Egg Production (%)	216	194	238	.362	.351	.431	.420
Hen-Day Egg Production	69.0	64.3	74.1	.338	.307	.507	.476
Income Over Feed and Chick Cost	2.06	1.50	2.53	.405	.320	.584	.499
Feed Per 24 Oz. Eggs	4.58	4.21	5.18	.503	.446	.629	.572
Egg Weight	24.9	23.4	26.5	.576	.503	.606	.532
Large and Extra Large Eggs (%)	69.7	53.5	84.3	.535	.475	.705	.645
Body Weight	4.8	3.7	6.9	.868	.846	.890	.868
Albumen Quality	76.6	70.9	80.2	.592	.531	.636	.576
Large Blood Spots (%)	1.1	0.5	2.1	.127	.127	.361	.361
Small Blood Spots (%)	2.0	1.4	2.7	.062	.062	.391	.391
Large Meat Spots (%)	1.3	0.1	10.7	.523	.502	.689	.669
Small Meat Spots (%)	2.7	0.3	29.4	.734	.688	.839	.793
Shell Thickness	14.1	13.3	14.6	.441	.405	.526	.490

Test	No. Pens		No. Stocks Tested		Percent Mortality			
					Growing Period		Laying Period	
	1962	1963	1962	1963	1962	1963	1962	1963
Alberta	16	22	8	11	+0.29	+0.10	+1.59	+0.01
Arizona	6	--	6	--	+0.01	----	-0.35	----
Arkansas Conventional	28	--	14	--	-1.60	----	+0.21	----
Arkansas Controlled	28	--	14	--	----	----	0.00	----
British Columbia	32	38	16	19	-0.01	0.00	-1.18	0.00
California Cage	37	47	37	47	----	----	+0.19	-0.03
California Floor	74	94	37	47	+0.92	+0.05	+0.55	+0.12
Central Canada	44	68	21	32	+0.23	+0.45	-2.29	-0.28
Florida	36	48	14	19	0.00	-0.02	+0.27	+0.07
Iowa #1	6	20	3	10	-1.41	-0.15	+1.40	+0.20
Iowa #2	8	--	4	--	-2.73	----	-3.44	----
Iowa #3	8	--	4	--	-2.77	----	+1.16	----
Iowa #4	2	--	2	--	-7.91	----	+0.16	----
Iowa #5	6	--	3	--	-4.27	----	+0.14	----
Iowa #6	6	--	3	--	-1.88	----	+1.29	----
Iowa #7	8	10	4	10	-7.93	-2.73	-0.15	+0.19
Iowa #8	6	10	3	10	-4.74	-0.54	-0.02	-0.12
Iowa #9	6	--	3	--	-1.87	----	-0.78	----
Iowa #10	6	--	3	--	-1.68	----	-4.58	----
Iowa #11	8	--	4	--	-5.59	----	+0.17	----
Iowa #12	6	--	3	--	-1.24	----	-0.02	----
Iowa #13	8	--	4	--	+0.15	----	+0.59	----
Iowa #14	4	--	2	--	-2.28	----	-2.12	----
Iowa #15	6	--	3	--	-0.99	----	-0.40	----
Iowa #16	8	--	4	--	-3.47	----	+1.53	----
Iowa #17	4	--	2	--	-3.02	----	-1.35	----
Iowa #18	8	--	4	--	-4.55	----	-3.14	----
Iowa #19	8	--	4	--	-0.83	----	+0.65	----
Iowa #20	6	20	3	10	-0.23	-0.01	-1.96	+0.07
Iowa #21	--	20	--	10	----	-1.69	----	+0.14
Kansas #1	7	--	7	--	-0.02	----	-0.15	----
Kansas #2	7	8	7	8	-0.89	-0.22	-1.10	+0.23
Kansas #3	7	8	7	8	-0.21	-0.04	+0.03	0.00
Kansas #4	7	8	7	8	-3.27	0.00	-6.38	-0.49
Kansas #5	--	8	--	8	----	-0.13	----	-0.63
Minnesota #1	10	15	10	15	-0.17	-0.15	+1.02	-0.02
Minnesota #2	10	15	10	15	-1.90	-1.80	-0.12	-0.11
Missouri	35	48	35	48	+0.65	+0.52	+0.58	+0.54
New Brunswick	18	32	9	16	+0.70	+1.62	+0.41	+1.11
New Hampshire #1	12	16	12	16	-0.01	+0.20	0.00	+0.05
New Hampshire #2	12	16	12	16	-0.04	-0.03	+1.82	+0.51
New Hampshire #3	12	--	12	--	-0.14	----	+0.58	----
New Hampshire #4	--	16	--	16	----	-0.29	----	+0.05
New Jersey	18	24	18	24	-1.32	-0.19	-0.37	-0.24
Central New York	17	33	17	33	+0.09	+0.03	+0.51	-0.25
Western New York	20	--	20	--	+0.29	----	+1.28	----
North Carolina	34	40	17	20	+0.64	+0.33	-0.22	+1.02
Pennsylvania	33	47	32	47	+0.10	+2.10	+1.26	-0.17
Rhode Island	15	22	15	22	+0.18	+0.42	-0.08	0.00
Tennessee	22	56	22	28	+0.28	0.00	-0.35	-0.72
Texas	18	30	14	23	-0.18	-0.01	-0.56	-0.34
Wisconsin	19	36	19	36	+0.01	+0.22	-0.17	0.00

Test	Days of Age at 50% Production		Egg Production Hen Housed (No.)		Egg Production Hen-Day (%)		Income Over Feed and Chick Cost ($)	
	1962	1963	1962	1963	1962	1963	1962	1963
Alberta	+ 6.57	+ 4.48	-13.51	+ 0.14	+ 0.71	+ 1.33	+0.03	+0.73
Arizona	+ 0.43	----	+ 0.65	----	+ 2.59	----	-0.17	----
Arkansas Conventional	-10.54*	----	+11.48	----	+ 2.46	----	-0.03	----
Arkansas Controlled	-10.54*	----	+19.21	----	+ 3.96	----	+0.04	----
British Columbia	- 8.99	- 9.33	+39.47	+12.32	+ 9.82	- 2.63	+0.40	+0.37
California Cage	- 7.33	- 0.84	-25.19	- 7.74	+ 2.02	+13.06	----	----
California Floor	+ 5.00	+ 3.55	-55.25	-39.63	- 3.54	+ 5.54	-1.45	-0.40
Central Canada	- 7.37	+ 3.47	+18.98	+ 9.21	- 1.81	- 0.14	+0.40	+0.41
Florida	+ 7.73	+ 5.62	-11.21	- 6.42	- 1.19	- 1.22	-0.40	-0.38
Iowa #1	+ 2.05	-32.21	+40.85	+57.05	+12.96	+11.85	----	----
Iowa #2	+ 5.48	----	+42.07	----	+ 9.39	----	----	----
Iowa #3	-32.85	----	+41.08	----	+ 6.98	----	----	----
Iowa #4	+10.98	----	+21.75	----	+ 8.14	----	----	----
Iowa #5	+ 1.31	----	+20.91	----	+ 5.12	----	----	----
Iowa #6	- 0.06	----	- 6.36	----	- 2.59	----	----	----
Iowa #7	- 1.67	- 6.26	+11.22	+12.99	- 0.84	+ 0.99	----	----
Iowa #8	- 0.07	- 6.16	+ 6.53	+19.83	- 0.56	+ 2.14	----	----
Iowa #9	+ 9.84	----	+35.48	----	+ 8.22	----	----	----
Iowa #10	+ 5.63	----	+77.08	----	+20.16	----	----	----
Iowa #11	-60.80	----	+40.58	----	+ 4.19	----	----	----
Iowa #12	-35.37	----	+21.40	----	- 3.52	----	----	----
Iowa #13	+ 4.78	----	+42.48	----	+15.21	----	----	----
Iowa #14	- 4.99	----	+36.87	----	+ 7.60	----	----	----
Iowa #15	- 5.78	----	+34.58	----	+ 6.73	----	----	----
Iowa #16	- 5.96	----	+15.68	----	+ 4.02	----	----	----
Iowa #17	- 9.09	----	+44.96	----	+10.85	----	----	----
Iowa #18	-19.31	----	+44.95	----	+ 2.68	----	----	----
Iowa #19	-13.70	----	+32.61	----	+ 7.99	----	----	----
Iowa #20	- 6.58	- 6.46	+63.97	+44.01	+14.66	+11.40	----	----
Iowa #21	----	-21.56	----	+29.03	----	+ 4.19	----	----
Kansas #1	+ 4.89	----	+28.97	----	+ 8.97	----	----	----
Kansas #2	+ 4.04	-24.58	+26.44	+20.16	+ 5.32	+ 2.74	----	----
Kansas #3	- 5.11	-28.20	+ 7.91	+16.61	+ 2.56	+ 2.59	----	----
Kansas #4	- 1.82	- 2.08	+43.74	+24.67	+ 5.84	+ 4.51	----	----
Kansas #5	----	-22.08	----	+23.16	----	+ 2.56	----	----
Minnesota #1	+ 5.13	+ 9.70	-11.02	-10.44	- 1.34	- 0.13	-0.21	+0.56
Minnesota #2	+ 2.23	+ 3.36	- 1.11	- 6.11	- 0.07	+ 0.57	+0.18	+0.47
Missouri	- 7.49	+ 5.61	-10.35	-23.56	- 3.70	- 5.00	-0.04	-0.45
New Brunswick	+ 5.96	+ 8.20	-22.71	-19.09	- 5.83	- 4.21	-0.38	-0.49
New Hampshire #1	-23.06	-16.52	+ 4.43	+14.61	- 4.26	+ 2.08	+0.17	+0.90
New Hampshire #2	-13.31	-18.96	-13.18	-13.30	- 4.02	- 6.64	-0.27	-0.33
New Hampshire #3	+ 2.94	----	+ 6.76	----	- 2.49	----	+0.16	----
New Hampshire #4	----	- 3.21	----	+11.71	----	+ 3.58	----	+0.02
New Jersey	- 7.72	- 5.81	+10.23	+13.51	+ 1.49	+ 5.92	-0.39	+0.47
Central New York	+ 2.54	- 1.38	-12.58	+ 5.86	- 3.40	- 0.16	-0.61	-0.48
Western New York	- 2.12	----	-17.26	----	- 2.68	----	-0.52	----
North Carolina	+ 5.02	+ 4.27	-12.33	-20.25	- 3.90	- 3.46	+0.35	+0.29
Pennsylvania	+12.64	+11.03	-20.98	- 7.24	- 1.44	- 1.87	+0.12	-0.29
Rhode Island	- 6.93	+ 1.58	-11.51	-15.76	- 5.27	- 4.25	-1.31	-1.53
Tennessee	+ 4.15	+ 2.24	+35.33	+25.52	+12.05	+ 4.55	+0.83	+0.49
Texas	+ 1.69	+ 3.74	+23.45	+13.89	+ 5.87	+ 6.78	+0.43	+0.23
Wisconsin	+ 2.66	- 8.26	-12.34	- 9.47	- 5.15	- 4.29	-0.20	-0.29

* The birds in these two tests were housed together until after reaching 50% Production. Thus the test adjustment factors are identical.

Test	Feed Per 24 Oz. of Eggs (Lbs.)		Egg Weight (Oz.)		% Large and Extra Large Eggs		Body Weight (Lbs.)	
	1962	1963	1962	1963	1962	1963	1962	1963
Alberta	-0.04	-0.74	-0.10	-0.28	+ 8.69	+ 4.44	-0.05	-0.27
Arizona	-0.01	----	+0.42	----	+ 4.80	----	+0.53	----
Arkansas Conventional	-0.23	----	-0.52	----	+ 1.91	----	+0.04	----
Arkansas Controlled	-0.29	----	-0.53	----	- 3.94	----	+0.09	----
British Columbia	-0.04	-0.04	+0.57	-1.66	- 0.08	+ 5.88	+0.51	+0.08
California Cage	----	----	-0.41	-0.43	-15.32	- 9.60	-0.01	+0.02
California Floor	+0.36	+0.28	+0.09	0.00	- 8.28	- 5.07	-0.09	-0.09
Central Canada	+0.26	+0.21	-0.13	-0.16	+ 8.84	+ 7.61	+0.10	-0.19
Florida	+0.34	+0.14	+0.58	+0.35	- 0.60	- 6.61	+0.04	+0.11
Iowa #1	----	----	-1.21	-0.34	-11.67	- 6.77	+0.29	-0.07
Iowa #2	----	----	-0.29	----	- 2.37	----	+0.01	----
Iowa #3	----	----	-0.85	----	- 2.91	----	+0.32	----
Iowa #4	----	----	-0.15	----	- 2.28	----	+0.10	----
Iowa #5	----	----	-0.07	----	- 2.06	----	-0.13	----
Iowa #6	----	----	-0.95	----	- 3.30	----	-0.52	----
Iowa #7	----	----	+0.31	+0.40	+ 9.04	+ 7.49	-0.01	+0.02
Iowa #8	----	----	+0.32	+0.25	+10.02	+ 4.68	-0.09	0.00
Iowa #9	----	----	+0.65	----	+ 0.81	----	+0.01	----
Iowa #10	----	----	+1.18	----	- 9.33	----	+0.17	----
Iowa #11	----	----	+0.04	----	- 1.78	----	+0.33	----
Iowa #12	----	----	-0.37	----	- 2.38	----	+0.25	----
Iowa #13	----	----	+0.25	----	- 1.24	----	-0.18	----
Iowa #14	----	----	+0.73	----	+ 1.38	----	-0.05	----
Iowa #15	----	----	+0.10	----	- 1.84	----	+0.11	----
Iowa #16	----	----	-0.56	----	- 2.48	----	+0.26	----
Iowa #17	----	----	+0.65	----	+ 0.89	----	-0.14	----
Iowa #18	----	----	-0.19	----	- 2.31	----	-0.27	----
Iowa #19	----	----	-0.50	----	- 2.42	----	-0.05	----
Iowa #20	----	----	+0.08	+0.08	+ 4.72	+ 1.27	+0.37	+0.35
Iowa #21	----	----	----	+0.41	----	+ 8.11	----	+0.02
Kansas #1	-0.54	----	-0.53	----	- 2.06	----	+0.21	----
Kansas #2	-0.52	-0.56	-1.00	-0.44	- 6.76	- 3.22	+0.05	+0.04
Kansas #3	+0.13	+0.19	-0.16	+0.47	+ 2.47	+13.99	+0.37	+0.03
Kansas #4	----	----	-0.73	-0.09	- 3.15	+ 1.35	-0.15	+0.01
Kansas #5	----	+0.19	----	-0.13	----	+ 1.75	----	+0.14
Minnesota #1	+0.13	-0.24	-0.26	-0.23	- 9.59	- 1.62	-0.34	-0.15
Minnesota #2	-0.21	-0.09	+0.28	-0.10	- 2.29	- 7.21	-0.06	+0.04
Missouri	+0.04	-0.37	0.00	+0.38	- 7.24	+ 0.77	+0.50	+0.10
New Brunswick	+0.62	+0.44	+0.56	+0.07	+14.66	+ 9.22	-0.20	-0.30
New Hampshire #1	-0.01	-0.58	-0.10	+0.50	+ 4.40	+ 3.85	+0.16	+0.40
New Hampshire #2	+0.12	+0.31	-0.44	-0.27	- 1.02	- 5.13	+0.43	+0.13
New Hampshire #3	+0.04	----	-0.45	----	+ 1.02	----	-0.22	----
New Hampshire #4	----	+0.30	----	-0.32	----	+ 1.35	----	+0.03
New Jersey	+0.17	-0.50	+0.65	+1.19	+ 3.49	+14.45	-0.18	-0.15
Central New York	+0.19	-0.09	-0.62	-0.59	+ 0.08	- 0.01	-0.04	-0.18
Western New York	0.00	----	-0.59	----	+ 4.93	----	-0.37	----
North Carolina	+0.21	+0.02	-0.66	-0.18	- 8.29	- 8.45	-0.31	-0.20
Pennsylvania	+0.11	+0.27	+0.06	+0.41	+15.31	+11.33	+0.02	+0.14
Rhode Island	-0.10	+0.03	-0.13	-0.55	-15.29	-15.45	+0.04	-0.01
Tennessee	-0.87	-0.33	-0.35	-0.21	-13.69	- 8.59	-0.22	-0.08
Texas	+0.15	+0.36	-0.21	+0.05	- 0.49	+ 1.28	-0.19	+0.12
Wisconsin	+0.25	+0.31	+0.24	-0.07	- 5.18	-10.37	-0.09	-0.07

THE ADJUSTMENT FACTORS USED TO ADJUST FOR TEST DIFFERENCES

Test	Albumen Quality Haugh Units		% Blood Spots 1/8 Inch or More		% Blood Spots Less than 1/8 Inch	
	1962	1963	1962	1963	1962	1963
Alberta	+1.29	+1.24	+0.02	+0.01	0.00	-0.04
Arizona	-3.51	----	+0.88	----	+0.44	----
Arkansas Conventional	+4.09	----	+0.54	----	+0.20	----
Arkansas Controlled	+5.34	----	+0.16	----	+0.10	----
British Columbia	+3.86	+5.03	0.00	-0.02	+0.29	-0.11
California Cage	+2.55	+2.30	-0.43	-0.30	-0.34	-0.74
California Floor	+2.13	+2.68	-0.09	0.00	-0.15	-0.30
Central Canada	+5.82	+8.28	0.00	0.00	-0.01	-0.16
Florida	-2.26	-1.36	+0.21	+0.01	-0.03	-0.28
Iowa #1	-5.23	-4.98	----	+0.28	----	+0.50
Iowa #2	-4.46	----	----	----	----	----
Iowa #3	-9.42	----	----	----	----	----
Iowa #4	-3.70	----	----	----	----	----
Iowa #5	-6.10	----	----	----	----	----
Iowa #6	-6.37	----	----	----	----	----
Iowa #7	-5.12	-5.10	----	-0.21	----	+0.84
Iowa #8	-6.84	-4.45	----	+0.09	----	+0.84
Iowa #9	-4.01	----	----	----	----	----
Iowa #10	-5.37	----	----	----	----	----
Iowa #11	-6.11	----	----	----	----	----
Iowa #12	-5.52	----	----	----	----	----
Iowa #13	-1.47	----	----	----	----	----
Iowa #14	-5.75	----	----	----	----	----
Iowa #15	-3.62	----	----	----	----	----
Iowa #16	-5.04	----	----	----	----	----
Iowa #17	-1.56	----	----	----	----	----
Iowa #18	-5.39	----	----	----	----	----
Iowa #19	-4.48	----	----	----	----	----
Iowa #20	-5.37	-3.18	----	-0.21	----	+0.84
Iowa #21	----	-3.30	----	0.00	----	+1.04
Kansas #1	-1.12	----	-0.69	----	-0.53	----
Kansas #2	-1.77	-8.15	-0.06	-0.35	-0.75	0.00
Kansas #3	-4.35	-4.74	+0.01	-0.01	-1.06	+0.03
Kansas #4	-5.16	-6.01	-0.01	-0.01	-0.67	-0.08
Kansas #5	----	-5.74	+0.25	----	-0.01	----
Minnesota #1	-4.98	-4.53	+0.91	+1.29	+0.50	+0.10
Minnesota #2	-5.04	-5.62	+1.61	+0.68	+0.33	+1.24
Missouri	-6.29	-2.37	-0.55	-0.07	+0.04	0.00
New Brunswick	+3.84	+4.57	-1.57	-0.85	-0.09	-0.35
New Hampshire #1	+6.42	+6.80	-0.14	-0.12	+0.16	+0.03
New Hampshire #2	+6.37	+6.56	-0.01	-0.72	+0.55	+0.05
New Hampshire #3	+4.67	----	-0.36	----	0.00	----
New Hampshire #4	----	+4.30	----	-0.84	----	-0.21
New Jersey	-5.65	-4.55	-0.05	-0.02	+0.16	+0.07
Central New York	+0.03	-2.30	-0.24	-0.10	-0.08	-0.08
Western New York	+0.45	----	----	-0.14	----	-0.17
North Carolina	-1.38	-1.46	-0.21	-0.09	-0.19	-0.12
Pennsylvania	-0.59	+0.23	+0.01	+0.02	0.00	+0.13
Rhode Island	+4.34	+4.74	-0.01	-0.01	-0.01	-0.08
Tennessee	+2.34	+3.42	-0.27	-0.01	-0.35	-0.16
Texas	-5.45	-2.29	+0.09	+0.25	-0.05	0.00
Wisconsin	-8.00	-4.47	-0.12	-0.01	-0.05	-0.16

Test	% Meat Spots 1/8 Inch or More		% Meat Spots Less than 1/8 Inch		Shell Thickness 1/1000 Inch	
	1962	1963	1962	1963	1962	1963
Alberta	+0.47	+0.09	+ 0.91	+0.19	+0.72	+0.89
Arizona	+0.47	----	+ 0.25	----	-0.33	----
Arkansas Conventional	-0.41	----	- 0.35	----	+1.00	----
Arkansas Controlled	-0.89	----	- 0.08	----	+1.01	----
British Columbia	+0.03	-0.27	+ 0.06	-0.03	+2.41	+1.56
California Cage	----	----	----	----	+0.38	-0.41
California Floor	----	----	----	----	+0.77	+0.17
Central Canada	+0.25	-0.45	0.00	-0.95	+1.35	+1.70
Florida	-0.22	+0.03	+ 0.27	+0.90	+0.06	+0.09
Iowa #1	----	+0.44	----	+0.84	+0.34	+0.58
Iowa #2	----	----	----	----	-0.17	----
Iowa #3	----	----	----	----	-0.03	----
Iowa #4	----	----	----	----	-0.20	----
Iowa #5	----	----	----	----	+0.03	----
Iowa #6	----	----	----	----	-0.34	----
Iowa #7	----	+0.44	----	+0.84	+0.27	+0.93
Iowa #8	----	+0.21	----	+0.51	+0.15	+0.89
Iowa #9	----	----	----	----	-0.55	----
Iowa #10	----	----	----	----	-1.30	----
Iowa #11	----	----	----	----	+0.67	----
Iowa #12	----	----	----	----	-0.21	----
Iowa #13	----	----	----	----	+0.37	----
Iowa #14	----	----	----	----	-0.07	----
Iowa #15	----	----	----	----	-0.22	----
Iowa #16	----	----	----	----	-0.09	----
Iowa #17	----	----	----	----	-0.34	----
Iowa #18	----	----	----	----	-0.09	----
Iowa #19	----	----	----	----	-0.60	----
Iowa #20	----	+0.44	----	+0.84	+0.17	+0.95
Iowa #21	----	+0.44	----	+0.66	----	+0.62
Kansas #1	-4.17	----	- 0.62	----	-0.77	----
Kansas #2	-4.35	-1.51	- 1.21	-1.31	-0.96	-0.37
Kansas #3	-2.97	-0.46	- 0.67	-0.44	-0.39	-0.17
Kansas #4	-3.02	-1.78	- 1.04	-1.15	-0.72	-0.48
Kansas #5	----	-2.27	----	-1.39	----	-0.75
Minnesota #1	+0.08	+0.34	+ 0.60	+0.89	-1.25	-1.07
Minnesota #2	+0.02	+0.30	+ 0.60	+0.89	-1.00	-1.14
Missouri	-0.72	+0.36	-11.78	+0.39	-0.18	-1.65
New Brunswick	+0.37	+0.24	+ 0.06	-0.24	+1.57	+1.84
New Hampshire #1	0.00	-0.44	- 0.32	-1.98	----	-0.09
New Hampshire #2	+0.25	-0.46	- 1.77	-3.13	----	-0.16
New Hampshire #3	-0.15	----	- 3.41	----	----	----
New Hampshire #4	----	-1.10	----	-3.09	----	-0.20
New Jersey	+0.05	+0.13	- 0.58	-0.41	-4.81	-3.29
Central New York	----	+0.15	----	+0.40	+1.11	+1.34
Western New York	----	----	----	----	+1.10	----
North Carolina	+0.01	+0.07	- 0.06	+0.08	-0.16	-0.36
Pennsylvania	+0.28	+0.58	+ 0.61	+1.11	-0.65	-0.54
Rhode Island	-1.39	-3.41	- 0.11	-0.16	+0.04	-0.03
Tennessee	+0.03	+0.14	+ 0.02	+0.37	+0.63	+0.91
Texas	0.00	+0.11	+ 0.33	+0.63	-0.63	-0.36
Wisconsin	-0.61	+0.03	- 0.34	+0.36	+1.15	+0.50

Definitions of Traits and Listing of Tests Which Were Not Included in the Analysis

Trait	Definition	Tests Not Included 1961-62	Tests Not Included 1962-63
Growing Mortality	Percent mortality to 150 days or subsequent age at housing.	Ark.(Contr.) Cal.(cage)	Cal. (cage)
Laying Mortality	Percent laying house mortality computed from 150 days or subsequent age at housing to 500 days of age.	None	None
Age at 50% Production	Days of age to 50% production calculated from the first day of the first two consecutive days of 50% production for living birds in the entry at that time.	Ark.(Contr.)	None
Hen-Housed Egg Production	Number of eggs per pullet housed to 500 days of age.	None	None
Hen-Day Egg Production	Percent hen-day production from the time the birds reached 50% production to 500 days of age.	None	None
Income Over Feed and Chick Cost	Income over feed and chick cost per pullet housed, with chick cost in 1,000 lots at hatch date adjusted for mortality (accidental deaths, sexing errors and missing chicks not included).	Cal.(cage) Iowa Kansas	Cal. (cage) Iowa Kansas
Feed per 24oz. Eggs	Pounds of feed per 24 ounces of egg produced, computed from a bulk weighing of eggs one day every two weeks or at least 2 days a month at equal intervals.	Cal.(cage) Iowa Kans.(farm 4)	Cal. (cage) Iowa Kans.(farm 4)
Egg Weight	Average annual egg weight computed from bulk weighings at least every two weeks or two days a month at equal intervals.	None	None
Large and Extra Large Eggs	Percent large and extra large eggs.	None	None
Body Weight	Body weight at end of test.	None	None
Albumen Quality	Albumen quality, Haugh units measured on one day's eggs per quarter or every three months, at equal intervals, broken-out basis.	None	None
Large Blood Spots	Percentage of eggs with (one or more) large blood spots 1/8 inch or more, computed from at least 3 days' eggs per quarter, broken-out basis.	Iowa	None
Small Blood Spots	Percentage of eggs with (one or more) small blood spots less than 1/8 inch, computed from at least 3 days' eggs per quarter, broken-out basis.	Iowa	None
Large Meat Spots	Percentage of eggs with (one or more) large colored meat spots 1/8 inch or more, computed from at least 3 days' eggs per quarter, broken-out basis.	Iowa C. N. Y. W. N. Y.	None
Small Meat Spots	Percentage of eggs with (one or more) small colored colored meat spots less than 1/8 inch, computed from at least 3 days' eggs per quarter, broken-out basis.	Cal. (cage) Cal. (floor) Iowa, C. N. Y., W. N. Y.	Cal. (cage) Cal. (floor)
Shell Thickness	Shell thickness by direct measurement to nearest 1/1000 inch from at least one breakout each quarter.	New Hamp.	None

INTRODUCTION

The information contained in the Quartile Ranking section of this publication deals only with the data obtained during the 1962-63 test year.

The performance of each entry in the 1962-63 Random Sample Egg Production Tests is reported as the quartile rank of the entry for the trait measured. These rankings were determined in the following manner. For each trait the entries in each test were aligned in descending order from the most desirable to the least desirable performance. The "mean" or average performance for the trait was then determined. All entries above the mean are in quartile 1 or 2 and those below the mean are in quartile 3 or 4. The dividing point for the entries above or below the mean is the midpoint of the range between the mean and the top or bottom entry. To illustrate:

The Pennsylvania test had a mean, or average, of 227.98 eggs for the trait "Eggs Per Pullet Housed." The highest average number of eggs laid by any entry was 262.20 and the lowest average number laid by any entry was 179.90 eggs. To arrive at the dividing point between the 1st and 2d quartiles, the mean (227.98) was subtracted from the highest number of eggs (262.20). The result, 34.22 eggs, was divided by two in order to get the midpoint of the range (17.11 eggs). This was subtracted from the highest average number of eggs (262.20 - 17.11) to arrive at the dividing point (245.09 eggs) between the 1st and 2d quartile. To determine the dividing point between the 3d and 4th quartiles, the same procedure was used, except that the lowest average number of eggs (179.90) was subtracted from the mean (227.98 eggs). This difference or range (48.08 eggs) was then divided by two and the result (24.04 eggs) was subtracted from the mean (227.98 - 24.04) to get the dividing point (203.94 eggs)between the 3d and 4th quartile. These determinations for each trait and each test are tabulated on pages 48 through 51.

The breeders of the tested stocks are listed in alphabetical order and the performance of each entry of the stock is shown under the breeder's name. Each entry is also identified by the abbreviated name of the entrant. In some cases, the sample was drawn from a source other than the entrant's hatchery or supply flock. In such cases, the abbreviated name of the source of the sample is shown in parentheses following the entrant's name.

The listing of the entries into the four quartile divisions, where all entries of each stock are listed together, permits the reader of the report to quickly evaluate a stock based on this method of analysis. It should be kept in mind, however, that this method provides just four broad classification. One-tenth of an egg or one-tenth of a percent difference in mortality could put an entry up one quartile or down one quartile, depending on its place in the quartile range.

LIST OF ENTRANTS OTHER THAN BREEDER OF STOCK

Name and Address	Stock Entered
Atwood Hatchery, Comanche, Texas	H & N
Babcock Hatchery, Inc., Lititz, Pennsylvania	Babcock
Bloomingdale Poultry Farm, Box 373, Valrico, Florida	Kimber
Brandenburg Hatchery, 735 Railroad Ave., Dunedin, Florida	DeKalb
Browder's Hatchery, Box 330, Tampa 12, Florida	Honegger
Check-R-Board, Box V, Palatka, Florida	Stone (Calif.)
Coombs Poultry Farm, Inc., Sedgwick, Kansas	Hy-Line
Corrigan-Gonzalez Export Corp., 4001 N. W. 25th St., Miami, Florida	Hy-Line
D & C Hatchery, Hamilton, Texas	Ideal

Name and Address	Stock Entered
Dirkse Leghorn Farm, Zeeland, Michigan	Ideal, Warren
Feather Hill Farm, Dade City, Florida	Babcock
Flinn's Hatchery, San Antonio, Texas	Honegger
Florin Farms, Inc., Mt. Joy, Pennsylvania	H & N
Florida Hen Ranch, 2300 N. Wingate Rd., Ft. Lauderdale, Florida	Honegger
Florida State Hatcheries, Box 666, Gainesville, Florida	Kimber
Frizzell Poultry Farm & Hatchery, 4818 97th Ave., Tampa, Florida	H & N
Garrison, Earl W., Inc., Bridgeton, New Jersey	Stever
Golden Oak Hatchery, DeLeon, Texas	Ideal
Great Plains Hatcheries, Effingham, Illinois	Lawton
Greider Leghorn Farms, Inc., Mt. Joy, Pennsylvania	Shaver
Grigsby's Hatchery, Box 65, Georgetown, Texas	DeKalb
Gulf Coast Hatchery, Inc., Box 361, Quincy, Florida	Babcock
Hodges Poultry Farm & Hatchery, Box 154, Callahan, Florida	Babcock
Hubbard Farms, Inc., Lancaster, Pennsylvania	Kimber
Hy-Lay Hatcheries, Inc., Box 1111, Bryan, Texas	Hy-Line
Indiana Farm Bureau Co-op Assn., Indianapolis, Indiana	Pa. Farm Bur.
Joe's Poultry Farm, Box 347, Arcadia, Florida	Babcock
Kazmeier Hatchery, Box 791, Bryan, Texas	Hy-Line
Kingsley Hatchery, Gillett, Pennsylvania	Demler
Longnecker's Hatchery, Elizabethtown, Pennsylvania	Kimber
Maple Leaf Hatchery, 1420 N. Volusia Ave., Orange City, Florida	Rapp
Miami International Hatchery, Inc., Box 48-1005, Miami, Florida	Kimber
Musselwhite Hatchery, Box 569, Maitland, Florida	DeKalb
Oak Crest Hatcheries, Inc., Box 563, Jacksonville, Florida	H & N
Orange Blossom Hatchery, Box 6442, Jacksonville, Florida	Dryden
Pierce, A. D. Hatchery, Inc., Brooklyn, Connecticut	Ames
Pierson-Craddock Hatchery, Box 511, Hamilton, Texas	DeKalb
Pine Acres Poultry Farm, Box 808, Lake City, Florida	H & N
Pine Air Poultry Acres, Box 843, Jacksonville, Florida	Honegger
Poultry Products, Inc., Box 66B, Winter Garden, Florida	Ideal
Swift & Co., Blair, Wisconsin	Shaver
Swift & Co., Box 588, Yoakum, Texas	Shaver
Tri-State Hatchery, Inc., Box 440, Marianna, Florida	Demler
Vance Hatchery, Shallowater, Texas	H & N
Voscinar Poultry Farm, Box 561, Brooksville, Florida	Ghostley
Wallace Hatchery, Inc., Box 11236, St. Petersburg, Florida	Hy-Line
Wallace Hy-Cross Hatcheries, Doylestown, Pennsylvania	Hy-Line
Wallis, Edwin & Sons, Inc., Liverpool, Pennsylvania	Demler
Weaver's Hatchery, Lititz, Pennsylvania	Cashman
Western Hatcheries, Gonzales, Texas	Kimber
Western Hatcheries, Henderson, Texas	Kimber
Wheelock, Walter E., Chambersburg, Pennsylvania	Ghostley
Williams Poultry Farm & Hatchery, Box 302, Denison, Texas	H & N
Wilson Poultry Farm & Hatchery, Clyde, Texas	Hy-Line
Yeiser Chix Inc., Winchester, Kentucky	Demler
Zollicker Hatchery, Harrisonville, Missouri	Hy-Line

MANAGEMENT SUMMARY

Test	MANAGEMENT										
	Hatch Date	Length of Test (days)	No. Entries	No.* Rep.	Birds per Rep.	Brooding	Rearing	Laying**	Lighting		Square Ft. per Bird
									Rearing	Laying	
Alberta	4/3/62	500	11	2	50	----	Data Not Reported by Test			----	---
Br. Columbia	3/20/62	500	19	2	45	----	Data Not Reported by Test			----	---
California	2/6/62	546	47	2	50	----	----	Litter	----	----	---
	2/27/62	546	47	2	18	----	----	Cage	----	----	---
Cen. Canada	3/26/62	500	34	2	60	Litter	Litter	Litter	Natural	14 hrs.	3.6
Florida	3/20/62	500	24	2	50	Litter	Litter	Litter	Natural	14 hrs.	2.9
Iowa	2/18/62	490	10	2	100	----	Data Not Reported by Test			----	---
	2/18/62	490	10	2	60	----	Data Not Reported by Test			----	---
	4/2/62	490	10	2	100	----	Data Not Reported by Test			----	---
	4/2/62	490	10	2	105	----	Data Not Reported by Test			----	---
Kansas	5/6/62	500	8	1	151	----	----	Litter	----	----	---
	5/6/62	500	8	1	144	----	----	Litter	----	----	---
	5/6/62	500	8	1	198	----	----	Litter	----	----	---
	5/6/62	500	8	1	110	----	----	Cage-C	----	----	---
Minnesota	3/28/62	500	15	1	60	Litter	Range	Slat-Litter	Natural	14 hrs. min.	2.0
	3/28/62	500	15	2	100	Litter	Range	Litter	Natural	14 hrs. min.	2.0
Missouri	3/11/62	500	48	2	25	Litter	Range	Litter	Natural	14 hrs.	3.8
New Bruns.	3/29/62	495	16	2	60	Litter	Litter	Litter	14 hrs. Artificial	14 hrs.	2.8
New Hamp.	5/4/62	490	16	1	180	Litter	Litter	Litter	Natural	14 hrs.	2.5
	5/4/62	490	16	1	100	Litter	Litter	Litter	Natural	14 hrs.	2.5
	5/4/62	490	16	1	60	Litter	Range	Litter	Step-down	14 hrs.	2.5
New Jersey	3/27/62	500	24	1	25	----	----	Litter	----	14 hrs.	3.2
	3/27/62	500	24	1	25	----	----	Cage-C	----	14 hrs.	
Cent. N. Y.	2/23/62	500	33	1	50	Litter	Range	Litter	Natural	14 hrs.	3.8
No. Carolina	2/9/62	500	20	2	50	Litter	Litter	Litter	Natural	14 hrs. min.	3.5
Pennsylvania	4/28/62	500	47	2	25	Litter	Litter	Litter	Natural	14 hrs.	3.3
Rhode Island	4/3/62	500	22	2	28	Litter	Litter	Litter	Natural	14 hrs.	2.8
Tennessee	3/31/62	500	28	4	15	Litter	Litter	Cage-1	Natural	14 hrs. 1/	---
Texas	2/27/62	500	30	6	8	Litter	Litter	Cage-1	Natural	14 hrs.	---
Wisconsin	3/5/62	500	36	2	25	Litter	Range	Litter	Natural	14 hrs. min.	2.4

1/ After 10 months of age, increase lights 15 minutes per week.

* Where replicates or locations are on different premises, or where one replicate consists of a floor pen and one consists of cages, the data for each separate replicate is given.

** Cage-1 -- 1 bird per cage. Cage-C -- Community cages.

RATIONS												
Percent Protein			Prod. Energy* Cal./lb.			C/P Ratio**			Weeks Birds Are On			
Start.	Grow.	Lay.	Start.	Grow.	Lay.	Start.	Grow.	Lay.	Start.	Grow.	Lay.	Test
----	----	----	----	Data Not Reported by Test				----	----	----	----	Alberta
----	----	----	----	Data Not Reported by Test				----	----	----	----	Br. Columbia
----	----	----	----	Data Not Reported by Test				----	----	----	----	California
21.8	16.9	16.9	880	910	970	63.0	89.0	85.0	8.0	13.5	50.0	Cen. Canada
22.0	17.4	17.0	944	958	930	42.9	55.2	54.9	12.0	10.0	50.0	Florida
----	----	----	----	Data Not Reported by Test				----	----	----	----	Iowa
----	----	----	----	Data Not Reported by Test				----	----	----	----	
----	----	----	----	Data Not Reported by Test				----	----	----	----	
----	----	----	----	Data Not Reported by Test				----	----	----	----	
----	----	----	----	Data Not Reported by Test				----	----	----	----	Kansas
----	----	----	----	Data Not Reported by Test				----	----	----	----	
----	----	----	----	Data Not Reported by Test				----	----	----	----	
----	----	----	----	Data Not Reported by Test				----	----	----	----	
21.5	15.4	17.1	879	880	882	40.9	57.1	51.6	8.0	12.0	50.0	Minnesota
20.9	16.3	17.3	861	874	857	41.1	54.1	50.1	9.0	13.0	50.0	Missouri
20.7	14.9	16.0	1300	1330	1360	63.0	89.0	85.0	8.0	13.0	50.0	New Bruns.
20.5	15.5	15.5	950	975	965	46.0	63.0	62.0	8.0	14.0	47.0	New Hamp.
22.0	----	16.0	----	----	----	----	----	----	----	----	----	New Jersey
----	----	16.7	----	----	1340	----	----	----	9.0	13.0	50.0	Cent. N. Y.
					820			51.2				
20.0	16.0	16.0	870	860	840	43.5	53.8	52.5	8.0	13.5	50.0	No. Carolina
21.0	17.0	18.0	910	950	948	42.0	48.0	56.0	10.0	11.0	50.0	Pennsylvania
21.2	16.2	16.4	910	945	900	43.0	58.5	54.9	8.0	13.0	50.0	Rhode Island
21.7	17.2	17.2	938	970	970	43.3	56.5	56.5	10.0	10.0	50.0	Tennessee
20.5	16.5	16.3	880	922	954	43.1	56.1	58.1	10.0	11.0	50.0	Texas
	14.0			898			52.8					
20.0	17.0	16.0	880	919	957	44.0	65.6	59.8	6.0	16.0	50.0	Wisconsin

* Energy stored as protein and fat.
** Calories divided by percent crude protein.

SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS

Trait Measured	Alberta		British Columbia		California Cage		California Floor	
Net Income Over Feed and Chick Costs Per Pullet Housed - Ave.	$1.430		$1.672		.....		$2.578	
Range - Quarter 1	$2.140	1.785	$2.440	2.056	.....	.....	$3.120	2.849
" " 2	1.784	1.430	2.055	1.672	.....	.....	2.848	2.578
" " 3	1.429	1.015	1.671	0.951	.....	.....	2.577	2.084
" " 4	1.014	0.600	0.950	0.230	.....	.....	2.083	1.590
Eggs Per Pullet Housed - Ave.	217.43		209.15		232.53		263.37	
Range - Quarter 1	245.00	231.21	237.70	223.42	269.30	250.91	287.80	275.58
" " 2	231.20	217.43	223.41	209.15	250.90	232.53	275.57	263.37
" " 3	217.42	196.86	209.14	196.37	232.52	211.56	263.36	241.93
" " 4	196.85	176.30	196.36	183.60	211.55	190.60	241.92	220.50
Days to 50% Production - Ave.	169.8		182.9		173.4		169.2	
Range - Quarter 1	166.0	167.9	173.0	178.0	162.0	167.7	160.0	164.6
" " 2	168.0	169.8	178.1	182.9	167.8	173.4	164.7	169.2
" " 3	169.9	171.4	183.0	185.5	173.5	181.7	169.3	176.1
" " 4	171.5	173.0	185.6	188.0	181.8	190.0	176.2	183.0
% Mortality Growing Period - Ave.	2.55		4.33		.....		2.84	
Range - Quarter 1	0.00	1.28	0.70	2.52	.....	.....	0.00	1.42
" " 2	1.29	2.55	2.53	4.33	.....	.....	1.43	2.84
" " 3	2.56	4.33	4.34	6.42	.....	.....	2.85	6.37
" " 4	4.34	6.10	6.43	8.50	.....	.....	6.38	9.90
% Mortality Laying House - Ave.	10.73		13.18		11.86		8.51	
Range - Quarter 1	3.00	6.87	4.40	8.79	2.80	7.33	2.00	5.26
" " 2	6.88	10.73	8.80	13.18	7.34	11.86	5.27	8.51
" " 3	10.74	16.87	13.19	19.39	11.87	19.83	8.52	13.26
" " 4	16.88	23.00	19.40	25.60	19.84	27.80	13.27	18.00
Egg Size - Average	25.05		26.00		25.33		24.92	
Range - Quarter 1	26.30	25.67	28.20	27.10	26.50	25.81	25.90	25.41
" " 2	25.66	25.05	27.09	26.00	25.80	25.33	25.40	24.92
" " 3	25.04	24.72	25.99	25.00	25.32	24.71	24.91	24.36
" " 4	24.71	24.40	24.99	24.00	24.70	24.10	24.35	23.80
% Large & Extra Large Eggs - Ave.	65.02		59.08		78.84		74.34	
Range - Quarter 1	73.40	69.21	69.20	64.14	88.10	83.47	82.00	78.17
" " 2	69.20	65.02	64.13	59.08	83.46	78.84	78.16	74.34
" " 3	65.01	61.06	59.07	46.24	78.83	74.07	74.33	68.12
" " 4	61.05	57.10	46.23	33.40	74.06	69.30	68.11	61.90
Pounds Feed Per 24 Oz. Eggs - Ave.	5.233		4.503		.....		4.202	
Range - Quarter 1	4.730	4.982	4.110	4.307	.....	.....	3.750	3.976
" " 2	4.983	5.233	4.308	4.503	.....	.....	3.977	4.202
" " 3	5.234	5.507	4.504	4.937	.....	.....	4.203	4.551
" " 4	5.508	5.780	4.938	5.370	.....	.....	4.552	4.900
Albumen - Haugh Units - Ave.	75.73		70.82		74.04		73.69	
Range - Quarter 1	80.20	77.96	76.70	73.76	79.80	76.92	79.00	76.34
" " 2	77.95	75.73	73.75	70.82	76.91	74.04	76.33	73.69
" " 3	75.72	74.11	70.81	67.46	74.03	71.02	73.68	70.09
" " 4	74.10	72.50	67.45	64.10	71.01	68.00	70.08	66.50
Blood Spots - All Sizes - Ave.	4.03		5.16		7.39		4.44	
Range - Quarter 1	1.10	2.57	2.40	3.78	2.30	4.85	0.90	2.67
" " 2	2.58	4.03	3.79	5.16	4.86	7.39	2.68	4.44
" " 3	4.04	4.92	5.17	8.23	7.40	15.65	4.45	6.22
" " 4	4.93	5.80	8.24	11.30	15.66	23.90	6.23	8.00

SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

Central Canada		Florida		Iowa		Kansas		Minnesota		Missouri	
$1.599		$2.694		.....		.....		$1.712		$2.644	
$2.320	1.959	$3.110	2.902	.....	.....	.....	.....	$2.030	1.871	$3.370	3.007
1.958	1.599	2.901	2.694	.....	.....	.....	.....	1.870	1.712	3.006	2.644
1.598	1.214	2.693	2.247	.....	.....	.....	.....	1.711	1.426	2.643	2.157
1.213	0.830	2.246	1.800	.....	.....	.....	.....	1.425	1.140	2.156	1.670
203.83		234.98		189.30		208.50		232.39		245.59	
231.40	217.61	250.10	242.54	200.60	194.95	223.80	216.15	253.60	252.54	274.50	260.04
217.60	203.83	242.53	234.98	194.94	189.30	216.14	208.50	252.53	232.39	260.03	245.59
203.82	187.51	234.97	216.49	189.29	180.40	208.49	200.50	232.38	224.39	245.58	223.99
187.50	171.20	216.48	198.00	180.39	171.50	200.49	192.50	224.38	216.40	223.98	202.40
173.3		165.6		190.0		190.5		166.4		168.4	
160.0	166.7	161.0	163.3	179.0	184.5	183.0	186.8	160.0	163.2	155.0	161.7
166.8	173.3	163.4	165.6	184.6	190.0	186.9	190.5	163.3	166.4	161.8	168.4
173.4	182.2	165.7	174.8	190.1	201.0	190.6	194.8	166.5	172.2	168.5	181.2
182.3	191.0	174.9	184.0	201.1	212.0	194.9	199.0	172.3	178.0	181.3	194.0
2.32		3.63		6.71		3.91		7.58		1.78	
0.00	1.16	0.00	1.82	3.00	4.86	2.40	3.16	2.40	4.99	0.00	0.89
1.17	2.32	1.83	3.63	4.87	6.71	3.17	3.91	5.00	7.58	0.90	1.78
2.33	3.71	3.64	5.97	6.72	8.66	3.92	4.96	7.59	10.39	1.79	4.39
3.72	5.10	5.98	8.30	8.67	10.60	4.97	6.00	10.40	13.20	4.40	7.00
16.19		7.60		8.01		10.86		11.79		6.88	
6.10	11.15	3.00	5.30	5.50	6.76	4.40	7.63	4.50	8.15	0.00	3.44
11.16	16.19	5.31	7.60	6.77	8.01	7.64	10.86	8.16	11.79	3.45	6.88
16.20	23.40	7.61	14.30	8.02	9.06	10.87	15.08	11.80	15.50	6.89	13.44
23.41	30.60	14.31	21.00	9.07	10.10	15.09	19.30	15.51	19.20	13.45	20.00
24.95		24.58		24.89		25.01		25.13		24.55	
26.10	25.52	25.10	24.84	25.10	24.99	25.40	25.20	25.50	25.31	26.90	25.72
25.51	24.95	24.83	24.58	24.98	24.89	25.19	25.01	25.30	25.13	25.71	24.55
24.94	24.42	24.57	24.19	24.88	24.79	25.00	24.90	25.12	24.81	24.54	23.97
24.41	23.90	24.18	23.80	24.78	24.70	24.89	24.80	24.80	24.50	23.96	23.40
61.00		76.00		69.02		67.05		74.64		68.58	
71.20	66.10	82.40	79.20	73.30	71.16	71.30	69.17	78.50	76.57	87.00	77.79
66.09	61.00	79.19	76.00	71.15	69.02	69.16	67.05	76.56	74.64	77.78	68.58
60.99	55.40	75.99	70.90	69.01	67.61	67.04	64.87	74.63	70.42	68.57	63.79
55.39	49.80	70.89	65.80	67.60	66.20	64.86	62.70	70.41	66.20	63.78	59.00
4.363		4.232		.....		4.356		4.555		4.807	
3.830	4.097	3.940	4.086	.....	.....	4.180	4.268	4.220	4.388	4.310	4.559
4.098	4.363	4.087	4.232	.....	.....	4.269	4.356	4.389	4.555	4.560	4.807
4.364	4.687	4.233	4.456	.....	.....	4.357	4.498	4.556	4.808	4.808	5.054
4.688	5.010	4.457	4.680	.....	.....	4.499	4.640	4.809	5.060	5.055	5.300
68.22		78.16		81.46		83.54		81.97		79.01	
70.90	69.56	82.20	80.18	84.00	82.73	86.90	85.22	83.90	82.93	84.10	81.55
69.55	68.22	80.17	78.16	82.72	81.46	85.21	83.54	82.92	81.97	81.54	79.01
68.21	65.81	78.15	75.33	81.45	79.28	83.53	81.17	81.96	80.03	79.00	76.70
65.80	63.40	75.32	72.50	79.27	77.10	81.16	78.80	80.02	78.10	76.69	74.40
4.39		4.41		3.75		4.60		1.17		4.62	
1.20	2.80	1.80	3.11	2.10	2.93	2.30	3.45	0.00	0.59	1.00	2.81
2.81	4.39	3.12	4.41	2.94	3.75	3.46	4.60	0.60	1.17	2.82	4.62
4.40	6.90	4.42	5.81	3.76	4.73	4.61	5.90	1.18	1.79	4.63	7.31
6.91	9.40	5.82	7.20	4.74	5.70	5.91	7.20	1.80	2.40	7.32	10.00

SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

Trait Measured	New Brunswick		New Hampshire		New Jersey		Central New York	
Net Income Over Feed and Chick Costs Per Pullet Housed - Ave.	$2.390		$2.134		$1.724		$2.626	
Range - Quarter 1	$2.960	2.675	$3.030	2.582	$2.590	2.157	$3.690	3.157
" " 2	2.674	2.390	2.581	2.134	2.156	1.724	3.156	2.626
" " 3	2.389	2.115	2.133	1.702	1.723	1.372	2.625	1.913
" " 4	2.114	1.840	1.701	1.270	1.371	1.020	1.912	1.200
Eggs Per Pullet Housed - Ave.	220.90		216.54		208.73		211.64	
Range - Quarter 1	255.60	238.25	239.40	227.97	246.00	227.37	257.70	234.67
" " 2	238.24	220.90	227.96	216.54	227.36	208.73	234.66	211.64
" " 3	220.89	209.10	216.53	204.87	208.72	189.16	211.63	178.47
" " 4	209.09	197.30	204.86	193.20	189.15	169.60	178.46	145.30
Days to 50% Production - Ave.	167.9		187.2		181.5		177.1	
Range - Quarter 1	158.0	163.0	180.0	183.6	171.0	176.3	165.0	171.1
" " 2	163.1	167.9	183.7	187.2	176.4	181.5	171.2	177.1
" " 3	168.0	171.5	187.3	193.1	181.6	186.8	177.2	187.1
" " 4	171.6	175.0	193.2	199.0	186.9	192.0	187.2	197.0
% Mortality Growing Period - Ave.	1.09		4.08		5.24		3.45	
Range - Quarter 1	0.00	0.55	0.60	2.34	1.80	3.52	0.00	1.73
" " 2	0.56	1.09	2.35	4.08	3.53	5.24	1.74	3.45
" " 3	1.10	1.95	4.09	7.64	5.25	8.97	3.46	6.13
" " 4	1.96	2.80	7.65	11.20	8.98	12.70	6.14	8.80
% Mortality Laying House - Ave.	5.88		7.24		14.40		14.51	
Range - Quarter 1	1.70	3.79	3.60	5.42	0.00	8.20	2.00	8.26
" " 2	3.80	5.88	5.43	7.24	8.21	14.40	8.27	14.51
" " 3	5.89	7.74	7.25	11.72	14.41	22.55	14.52	29.26
" " 4	7.75	9.60	11.73	16.20	22.56	30.70	29.27	44.00
Egg Size - Average	25.29		25.44		23.63		25.65	
Range - Quarter 1	26.00	25.64	26.70	26.07	24.70	24.16	27.30	26.47
" " 2	25.63	25.29	26.06	25.44	24.15	23.63	26.46	25.65
" " 3	25.28	24.94	25.43	24.92	23.62	23.06	25.64	24.77
" " 4	24.93	24.60	24.91	24.40	23.05	22.50	24.76	23.90
% Large & Extra Large Eggs - Ave.	65.85		75.38		54.35		71.54	
Range - Quarter 1	74.60	70.22	88.00	81.69	69.50	61.92	85.20	78.37
" " 2	70.21	65.85	81.68	75.38	61.91	54.35	78.36	71.54
" " 3	65.84	61.32	75.37	68.39	54.34	45.82	71.53	60.37
" " 4	61.31	56.80	68.38	61.40	45.81	37.30	60.36	49.20
Pounds Feed Per 24 Oz. Eggs - Ave.	4.457		4.572		4.956		4.595	
Range - Quarter 1	3.940	4.199	4.220	4.396	4.330	4.643	4.050	4.323
" " 2	4.200	4.457	4.397	4.572	4.644	4.956	4.324	4.595
" " 3	4.458	4.834	4.573	5.006	4.957	5.193	4.596	4.983
" " 4	4.835	5.210	5.007	5.440	5.194	5.430	4.984	5.370
Albumen - Haugh Units - Ave.	71.81		70.19		81.84		79.98	
Range - Quarter 1	75.90	73.85	76.50	73.34	86.20	84.02	84.80	82.39
" " 2	73.84	71.81	73.33	70.19	84.01	81.84	82.38	79.98
" " 3	71.80	70.65	70.18	67.59	81.83	80.57	79.97	77.74
" " 4	70.64	69.50	67.58	65.00	80.56	79.30	77.73	75.50
Blood Spots - All Sizes - Ave	10.58		8.53		3.20		4.78	
Range - Quarter 1	1.90	6.24	2.30	5.42	1.50	2.35	0.60	2.69
" " 2	6.25	10.58	5.43	8.53	2.36	3.20	2.70	4.78
" " 3	10.59	15.54	8.54	24.32	3.21	4.20	4.79	7.09
" " 4	15.55	20.50	24.33	40.10	4.21	5.20	7.10	9.40

SUMMARY OF IMPORTANT DATA FOR ALL RANDOM SAMPLE EGG LAYING TESTS (Continued)

North Carolina		Pennsylvania		Rhode Island		Tennessee		Texas		Wisconsin	
$1.932		$2.494		$3.657		$1.691		$2.060		$2.526	
$2.550	2.241	$3.100	2.797	$4.410	4.033	$2.760	2.225	$2.610	2.335	$2.920	2.723
2.240	1.932	2.796	2.494	4.032	3.657	2.224	1.691	2.334	2.060	2.722	2.526
1.931	1.666	2.493	1.987	3.656	2.973	1.690	1.245	2.059	1.690	2.525	2.028
1.665	1.400	1.986	1.480	2.972	2.290	1.244	0.800	1.689	1.320	2.027	1.530
242.58		227.98		233.89		195.71		211.47		232.56	
268.90	255.74	262.20	245.09	260.70	247.29	238.00	216.85	235.20	223.33	249.50	241.03
255.73	242.58	245.08	227.98	247.28	233.89	216.84	195.71	223.32	211.47	241.02	232.56
242.57	233.74	227.97	203.94	233.88	214.99	195.70	173.90	211.46	196.38	232.55	213.83
233.73	224.90	203.93	179.90	214.98	196.10	173.89	152.10	196.37	181.30	213.82	195.10
170.3		164.2		174.6		171.8		170.3		181.4	
162.0	166.2	154.0	159.1	165.0	169.8	163.0	167.4	164.0	167.2	171.0	176.2
166.3	170.3	159.2	164.2	169.9	174.6	167.5	171.8	167.3	170.3	176.3	181.4
170.4	173.2	164.3	174.6	174.7	180.3	171.9	177.9	170.4	180.2	181.5	196.2
173.3	176.0	174.7	185.0	180.4	186.0	178.0	184.0	180.3	190.0	196.3	211.0
1.76		10.74		1.82		3.50		3.73		2.23	
0.90	1.33	1.60	6.17	0.00	0.91	0.00	1.75	0.00	1.87	0.00	1.12
1.34	1.76	6.18	10.74	0.92	1.82	1.76	3.50	1.88	3.73	1.13	2.23
1.77	2.63	10.75	21.52	1.83	5.21	3.51	6.80	3.74	6.87	2.24	5.67
2.64	3.50	21.53	32.30	5.22	8.60	6.81	10.10	6.88	10.00	5.68	9.10
5.01		12.92		9.29		16.25		12.36		10.25	
0.00	2.51	2.00	7.46	3.60	6.45	6.70	11.48	2.10	7.23	0.00	5.13
2.52	5.01	7.47	12.92	6.46	9.29	11.49	16.25	7.24	12.36	5.14	10.25
5.02	9.51	12.93	23.46	9.30	14.50	16.26	25.63	12.37	17.63	10.26	14.43
9.52	14.00	23.47	34.00	14.51	19.70	25.64	35.00	17.64	22.90	14.44	18.60
25.11		24.69		25.62		24.92		24.87		24.98	
26.20	25.65	26.80	25.74	26.80	26.21	26.20	25.56	25.40	25.13	25.90	25.44
25.64	25.11	25.73	24.69	26.20	25.62	25.55	24.92	25.12	24.87	25.43	24.98
25.10	24.65	24.68	24.09	25.61	25.01	24.91	24.31	24.86	24.43	24.97	24.59
24.64	24.20	24.08	23.50	25.00	24.40	24.30	23.70	24.42	24.00	24.58	24.20
77.96		60.60		87.57		76.64		68.95		80.03	
86.90	82.43	83.50	72.05	94.70	91.13	84.90	80.77	76.30	72.62	88.90	84.46
82.42	77.96	72.04	60.60	91.12	87.57	80.76	76.64	72.61	68.95	84.45	80.03
77.95	72.83	60.59	50.70	87.56	83.03	76.63	69.77	68.94	62.57	80.02	75.76
72.82	67.70	50.69	40.80	83.02	78.50	69.76	62.90	62.56	56.20	75.75	71.50
4.443		4.214		4.587		4.758		4.017		4.099	
3.980	4.212	3.900	4.057	4.160	4.374	4.130	4.444	3.700	3.859	3.800	3.950
4.213	4.443	4.058	4.214	4.375	4.587	4.445	4.758	3.860	4.017	3.951	4.099
4.444	4.677	4.215	4.722	4.588	5.124	4.759	4.999	4.018	4.209	4.100	4.450
4.678	4.910	4.723	5.230	5.125	5.660	5.000	5.240	4.210	4.400	4.451	4.800
78.21		77.29		71.50		73.38		79.40		81.56	
84.00	81.10	83.60	80.44	75.60	73.55	80.00	76.69	83.60	81.50	86.50	84.03
81.09	78.21	80.43	77.29	73.54	71.50	76.68	73.38	81.49	79.40	84.02	81.56
78.20	76.35	77.28	75.04	71.49	68.70	73.37	69.84	79.39	76.75	81.55	78.28
76.34	74.50	75.03	72.80	68.69	65.90	69.83	66.30	76.74	74.10	78.27	75.00
5.15		2.81		4.29		5.19		2.83		4.33	
2.30	3.73	0.00	1.41	1.90	3.10	1.90	3.55	0.00	1.42	1.70	3.02
3.74	5.15	1.42	2.81	3.11	4.29	3.56	5.19	1.43	2.83	3.03	4.33
5.16	6.28	2.82	6.06	4.30	6.00	5.20	6.95	2.84	5.22	4.34	6.47
6.29	7.40	6.07	9.30	6.01	7.70	6.96	8.70	5.23	7.60	6.48	8.60

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Allstate Hatchery, Willmar, Minnesota													
Allstate, Minn.	Cal. C	WL	SX	LX 330		3	2		1	4	4		2	2
Allstate, Minn.	Cal. F	WL	SX	LX 330	3	3	3	4	3	4	4	2	2	3
Allstate, Minn.	Minn.	WL	SX	LX 330	4	4	2	3	3	4	4	4	1	2
Allstate, Minn.	Tenn.	WL	SX	LX 330	2	2	2	2	3	3	3	2	3	2
Allstate, Minn.	Wisc.	WL	SX	LX 330	3	2	3	2	3	3	3	3	2	1
Allstate Hatchery, Willmar, Minnesota													
Allstate, Minn.	CNY	WL	SX	LX 360	4	3	2	4	3	4	4	3	3	1
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa (Childers, Cal.)	Cal. C		INX	Ames 424		2	4		1	2	1		2	1
Ames, Iowa (Childers, Cal.)	Cal. F		INX	Ames 424	1	2	4	3	1	2	1	1	1	2
Ames, Iowa	Iowa		INX	Ames 424		4	4	2	4	1	2		1	4
Ames, Iowa	Mo.		INX	Ames 424	2	3	4	4	2	2	2	2	1	1
Ames, Iowa	Penna.		INX	Ames 424	1	1	3	2	1	3	4	2	1	2
Ames, Iowa	Texas		INX	Ames 424	3	3	4	3	3	1	1	2	1	3
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa (Hart's, Ore.)	Cal. C		INX	Ames 434 R		3	3		4	4	4		3	2
Ames, Iowa (Hart's, Ore.)	Cal. F		INX	Ames 434 R	4	4	3	3	4	3	3	4	3	2
Ames, Iowa (Bray, Ont.)	C. C.		INX	Ames 434 R	2	1	2	3	1	3	3	3	3	1
Ames In-Cross, Des Moines, Iowa													
Ames, Iowa (Cook's, N.S.)	N. B.		INX	Ames 505	3	3	2	1	4	1	2	3	3	4
Ames, Iowa	N. H.		INX	Ames 505	3	4	4	2	1	2	1	3	2	3
Ames, Iowa (Mid Valley, Va.)	N. C.		INX	Ames 505	3	4	2	1	1	2	2	4	3	1
A. D. Pierce, Conn.	R. I.		INX	Ames 505	3	3	1	1	1	4	4	3	4	2
Andrews, J. J., R. R. #3, Chilliwack, B. C.													
Andrews, B. C.	B. C.	WL	SX	Andrews	3	2	2	2	2	2	3	2	4	2
Andrews, J. J., R. R. #3, Chilliwack, B. C.													
Andrews, B. C.	Alta.	CGxWL	BX	Polka Dot	3	2	3	2	2	4	4	3	2	3
Andrews, B. C.	B. C.	CGxWL	BX	Polka Dot	2	2	3	1	2	4	3	2	2	3
Andrews, B. C.	C. C.	CGxWL	BX	Polka Dot	3	2	3	2	1	4	4	3	1	2
Animal Research Institute, Ottawa, Ontario													
A. R. I., Ont.	C. C.	WL	PS	Random Bred	4	4	4	3	3	4	4	4	2	4
A. R. I., Ont.	C. C.	WL	PS	Random Bred	4	4	4	3	3	4	4	4	1	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Animal Research Institute, Kentville, Nova Scotia													
A. R. I., N. S.	C. C.	WL	PS	Kentville R. B. C.	3	4	2	3	3	2	2	3	3	4
A. R. I., N. S.	C. C.	WL	PS	Kentville R. B. C.	2	1	2	1	1	2	2	2	2	3
Anthony, Geo. M. & Sons, Strausstown, Penna.													
Anthony, Penna.	Mo.	WL	SX	Anthony	3	3	3	1	4	3	2	2	2	3
Anthony, Penna.	N. J.	WL	SX	Anthony	3	3	3	2	2	3	3	3	2	1
Anthony, Penna.	CNY	WL	SX	Anthony	2	2	2	3	2	3	3	2	1	1
Anthony, Penna.	Penna.	WL	SX	Anthony	2	2	2	1	2	3	2	2	2	3
Anthony, Penna.	R. I.	WL	SX	Anthony	2	2	3	3	1	2	2	2	1	2
Anthony, Penna.	Wisc.	WL	SX	Anthony	3	3	2	1	4	3	2	3	2	3
Appleby Poultry Br. Farm, Mission, B. C.													
Appleby, B. C.	B. C.	WL	SX	Life Line A	3	4	4	1	3	3	2	3	2	2
Appleby Poultry Br. Farm, Mission, B. C.													
Appleby, B. C.	B. C.	WL	SX	Life Line B	2	2	3	3	2	4	3	1	3	2
Arbor Acres Farm, Inc., Glastonbury, Conn.													
Arbor Acres, Conn. (A. A., Ind. & Cal.)	Cal. C	WL	SX	Queen		3	2		3	1	1		1	2
Arbor Acres, Conn. (A. A., Ind. & Cal.)	Cal. F	WL	SX	Queen	1	1	3	1	1	1	1	1	2	3
Arbor Acres, Conn.	Iowa	WL	SX	Queen		3	3	2	2	1	2		1	4
Arbor Acres, Conn. (A. A., Ark.).....	Kansas	WL	SX	Queen		4	4	4	4	1	1	1	1	4
Arbor Acres, Ind. (A. A., Conn.).....	Minn.	WL	SX	Queen	1	2	3	2	4	1	1	2	2	3
Arbor Acres, Conn. (A. A., Ark.).....	Mo.	WL	SX	Queen	1	1	2	2	2	2	2	1	1	3
Arbor Acres, Conn.	N. H.	WL	SX	Queen	3	3	1	3	4	3	3	1	2	2
Arbor Acres, Conn. (A. A., N. Y.).....	N. J.	WL	SX	Queen	1	2	2	3	3	1	1	1	2	2
Arbor Acres, Conn. (Hawley, N. Y.)...	CNY	WL	SX	Queen	3	4	3	4	4	2	2	2	1	4
Arbor Acres, Conn. (A. A., N. C.)...	N. C.	WL	SX	Queen	3	3	3	3	4	1	1	2	2	4
Arbor Acres, Conn.	Penna.	WL	SX	Queen	1	1	2	2	3	2	2	1	2	1
Arbor Acres, Conn.	Texas	WL	SX	Queen	1	2	2	2	3	1	1	1	1	1
Arbor Acres, Conn. (A. A., Ind.).....	Wisc.	WL	SX	Queen	1	2	2	2	3	1	2	1	2	2
Ava Hatchery, Ava, Missouri													
Ava, Mo.	Mo.	WL	SX	Certified	3	3	3	3	3	3	3	3	2	2
Avery, C. T. & Son, Colrain, Massachusetts													
Avery, Mass.	N. H.	RIR	PS	Flock Mating	4	4	4	4	4	4	4	4	4	4
Avery, Mass.	R. I.	RIR	PS	Flock Mating	4	4	4	4	4	4	3	4	4	4

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Babcock Poultry Farm, Inc., Ithaca, New York													
Babcock, N. Y. (Edwards, Alta.).....	Alta.	WL SX	Babcock B-300	1	1	1	3	2	3	3	1	4	4
Babcock, N. Y. (Hogsett, Cal.).....	Cal. C	WL SX	Babcock B-300		2	2		3	3	3		3	2
Babcock, N. Y. (Hogsett, Cal.).....	Cal. F	WL SX	Babcock B-300	2	2	2	3	1	3	3	3	2	3
Hodges, Fla.	Fla.	WL SX	Babcock B-300	2	1	1	2	2	3	3	3	3	2
Joe's, Fla.	Fla.	WL SX	Babcock B-300	3	2	2	3	3	2	2	3	2	3
Feather Hill, Fla.	Fla.	WL SX	Babcock B-300	2	2	1	4	2	2	2	2	3	3
Babcock, N. Y.	Iowa	WL SX	Babcock B-300		1	1	3	3	3	4		3	3
Babcock, N. Y. (Nelson's, Kans.) .	Kansas	WL SX	Babcock B-300		3	1	2	2	3	1	3	3	4
Babcock, N. Y. (Mettlings, Minn.)....	Minn.	WL SX	Babcock B-300	1	2	1	2	1	2	2	2	3	3
Babcock, N. Y.	Mo.	WL SX	Babcock B-300	3	3	2	3	3	2	3	3	4	4
Babcock, N. Y.	N. H.	WL SX	Babcock B-300	2	1	1	2	3	3	3	1	3	2
Babcock, N. Y.	N. J.	WL SX	Babcock B-300	2	2	1	2	3	3	3	2	4	1
Babcock, N. Y.	CNY	WL SX	Babcock B-300	2	2	1	3	3	3	3	2	4	3
Babcock, N. Y. (Harrolds, Ga.).....	N. C.	WL SX	Babcock B-300	2	2	1	2	2	3	3	2	4	4
Babcock, Penna.	Penna.	WL SX	Babcock B-300	3	3	1	2	3	3	2	3	4	3
Babcock, N. Y.	Tenn.	WL SX	Babcock B-300	1	1	1	2	1	3	2	1	3	3
Babcock, N. Y. (Noble, Wisc.).....	Wisc.	WL SX	Babcock B-300	3	3	2	3	3	3	4	3	3	4
Babcock Poultry Farm, Inc., Ithaca, New York													
Babcock, N. Y. (Babcock, Cal.).....	Cal. C	CGxWL BX	Babcock B-370		2	2		3	4	4		4	3
Babcock, N. Y. (Babcock, Cal.).....	Cal. F	CGxWL BX	Babcock B-370	3	3	1	2	3	4	4	3	4	2
Gulf Coast, Fla.	Fla.	CGxWL BX	Babcock B-370	4	3	1	4	2	4	4	4	4	3
Babcock, N. Y.	Mo.	CGxWL BX	Babcock B-370	2	1	1	2	1	4	4	3	4	2
Babcock, Penna.	Penna.	CGxWL BX	Babcock B-370	3	2	1	2	3	4	4	3	4	1
Babcock, N. Y.	R. I.	CGxWL BX	Babcock B-370	2	2	2	3	1	3	3	2	4	1
Babcock, N. Y.	Tenn.	CGxWL BX	Babcock B-370	2	1	1	2	1	2	2	2	4	3
Balakshin, N. A., R. R. #3, Chilliwack, B. C.													
Balakshin, B. C.	B. C.	WL SX	Type B	2	4	2	4	4	3	3	2	3	1
Balakshin, N. A., R. R. #3, Chilliwack, B. C.													
Balakshin, B. C.	B. C.	WL SX	Balakshin	2	1	3	3	1	4	3	3	1	1
Balakshin, B. C.	C. C.	WL SX	Balakshin	2	2	1	1	1	4	4	3	2	3
Ball Poultry Farm, Owego, New York													
Ball, N. Y.	CNY	WL SX	551 A	3	3	2	2	3	3	3	3	2	4
Ball, N. Y.	Penna.	WL SX	551 A	2	3	1	3	3	2	2	1	3	2
Ball, N. Y.	Wisc.	WL SX	551 A	2	3	2	4	2	3	3	3	3	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Baum, Leon, Locke, New York													
Baun, N. Y.	CNY	CGxWL BX	B x W	2	1	1	1	1	4	4	2	3	3
Beamsdale Farm, Lawndale, North Carolina													
Beamsdale, N. C.	Mo.	WL SX	Beamsdale 66	2	2	2	3	3	4	4	2	2	3
Beamsdale, N. C.	N. C.	WL SX	Beamsdale 66	2	2	2	3	2	3	3	3	2	2
Booth Farms & Hatchery, Clinton, Missouri													
Booth, Mo.	Mo.	INX	Booth Line 351	2	3	2	1	2	2	2	2	2	1
Booth Farms & Hatchery, Clinton, Missouri													
Booth, Mo.	Mo.	INX	Booth Line 352	3	3	2	2	3	3	3	3	3	3
Brender's Leghorns, Ferndale, New York													
Brender, N. Y.	Minn.	WL SX	Money Maker #1	2	3	3	1	1	2	1	3	3	1
Brender, N. Y.	Mo.	WL SX	Money Maker #1	3	3	3	2	2	2	2	4	2	3
Brender, N. Y.	N. J.	WL SX	Money Maker #1	2	3	3	3	2	2	1	2	2	2
Brender, N. Y.	CNY	WL SX	Money Maker #1	2	2	2	3	2	2	2	2	3	3
Brender, N. Y.	Penna.	WL SX	Money Maker #1	3	3	3	1	2	2	3	2	3	4
Brender, N. Y.	Wisc.	WL SX	Money Maker #1	2	3	1	3	3	1	1	2	3	2
Brender's Leghorns, Ferndale, New York													
Brender, N. Y.	N. C.	WL SX	Brender Beauty	2	4	4	1	2	3	2	2	3	1
Brender, N. Y.	R. I.	WL SX	Brender Beauty	1	2	3	2	1	3	2	1	2	3
Brender, N. Y.	Tenn.	WL SX	Brender Beauty	3	3	3	2	2	2	2	4	3	2
Brender, N. Y.	Texas	WL SX	Brender Beauty	3	3	2	3	3	4	4	3	2	2
Buchanan's Poultry Ranch, Haney, B. C.													
Buchanan, B. C.	B. C.	WLx(WLxBA)	Kanaka White	2	3	4	1	3	3	2	2	3	3
Buchanan, B. C.	C. C.	WLx(WLxBA)	Kanaka White	1	1	2	3	1	2	2	2	4	1
Buchanan's Poultry Ranch, Haney, B. C.													
Buchanan, B. C.	B. C.	WLxSyn BX	Monarch	4	3	2	4	4	2	2	2	4	1
Bundesen Bros., Petaluma, California													
Bundesen, Cal. (Riverside, Cal.).....	Cal. C	CGxWL BX	Graycie		1	2		1	3	3		4	2
Bundesen, Cal. (Riverside, Cal.).....	Cal. F	CGxWL BX	Graycie	2	2	1	1	3	3	3	2	3	2
Burpee, A. K., Woodstock, N. B.													
Burpee, N. B.	N. B.	WLxLS BX	Burpee's #31	2	2	2	4	4	4	3	1	1	1
Burpee, A. K., Woodstock, N. B.													
Burpee, N. B.	C. C.	WLx(RIRxLS)	Burpee's 321	3	3	2	1	3	2	1	3	3	2
Burpee, N. B.	N. B.	WLx(RIRxLS)	Burpee's 321	2	2	1	2	4	3	4	2	4	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Cameron Leghorn Res. Farm, Beaver Springs, Penna.													
Cameron, Penna.	Penna.	WL SX	924	1	1	1	2	3	3	3	1	2	1
Carey Farms, Marion, Ohio													
Carey, Ohio	CNY	WL SX	Carey Nicks	3	3	3	1	2	2	2	2	1	2
Carey Farms, Marion, Ohio													
Carey, Ohio	Mo.	WL SX	E. J.'s	3	3	2	2	3	2	2	3	2	4
Carey, Ohio	Penna.	WL SX	E. J.'s	4	4	4	4	4	3	2	3	1	3
Cashman Leghorn Farm, Webster, Kentucky													
Cashman, Ky.	B. C.	WL SX	Hi-Cash	3	4	3	3	4	2	3	1	3	2
Cashman, Ky. (Ivans, Minn.).....	Minn.	WL SX	Hi-Cash	3	3	2	4	3	4	4	3	3	3
Cashman, Ky.	Mo.	WL SX	Hi-Cash	3	2	2	1	4	3	2	3	2	3
Cashman, Ky. (Bowers, N. C.).....	N. C.	WL SX	Hi-Cash	2	2	3	3	3	3	2	2	4	4
Weaver's, Penna.	Penna.	WL SX	Hi-Cash	3	3	3	3	2	3	3	3	3	3
Cashman, Ky.	Tenn.	WL SX	Hi-Cash	2	2	3	3	3	3	3	2	3	2
Cashman, Ky.	Texas	WL SX	Hi-Cash	3	3	3	1	4	4	3	3	4	2
Cashman Leghorn Farm, Webster, Kentucky													
Cashman, Ky.	Mo.	WL IN	Astronauts	3	3	2	2	4	4	4	3	2	2
Childers Hatchery, Santa Ana, California													
Childers, Cal.	Cal. C	CGxWL BX	EGGSecutive		2	2		1	1	2		3	2
Childers, Cal.	Cal. F	CGxWL BX	EGGSecutive	2	2	1	1	3	3	2	2	3	2
Clark, H. R., Burtt's Corner, New Brunswick													
Clark, N. B.	C. C.	WL SX	Clark's #57	1	2	3	1	1	2	1	2	1	1
Clark, N. B.	N. B.	WL SX	Clark's #57	1	1	4	4	1	4	3	1	2	1
Clark's Poultry Farm, Brandon, Manitoba													
Clark, Manitoba	C. C.	RIRx(LSxRIR)	Paymaster 101	2	2	2	3	3	2	2	3	3	1
Colonial Poultry Farms, Pleasant Hill, Missouri													
Colonial, Mo. (Colonial, Minn.).....	Minn.	WL IN	True-Line 365B	4	4	3	1	3	3	3	3	1	4
Colonial, Mo.	Mo.	WL IN	True-Line 365B	4	4	3	4	3	3	4	4	2	4
Colonial, Mo. (Kreher, N. Y.)	CNY	WL IN	True-Line 365B	4	3	2	3	3	3	3	3	4	3
Colonial, Mo.	Penna.	WL IN	True-Line 365B	3	3	1	3	2	3	4	3	4	3
Colonial, Mo.	Texas	WL IN	True-Line 365B	3	3	1	3	3	3	3	3	3	4
Colonial, Mo. (Colonial, Minn.).....	Wisc.	WL IN	True-Line 365B	4	4	3	1	3	4	3	4	3	3
Colonial Poultry Farms, Pleasant Hill, Missouri													
Colonial, Mo.	Mo.	INX	True-Line #142	2	2	1	2	1	3	3	2	4	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Davis, Joe K., Hatchery, Earl, North Carolina													
Davis, N. C. (Hamrick, S. C.).....	Cal. C	RIRxBPR BX	Combiner		2	2		1	1	1		3	2
Davis, N. C. (Hamrick, S. C.).....	Cal. F	RIRxBPR BX	Combiner	1	2	2	2	2	1	1	3	3	2
Davis, N. C.	Penna.	RIRxBPR BX	Combiner	4	4	3	3	4	1	1	3	3	3
Davis, N. C.	R. I.	RIRxBPR BX	Combiner	2	2	2	1	2	1	1	3	2	2
DeKalb Agricultural Assoc., Sycamore, Ill.													
DeKalb, Ill. (Harelson, & Sanders, Cal.)	Cal. C	INX	DeKalb 131		2	2		3	3	2		2	3
DeKalb, Ill. (Harelson, & Sanders, Cal.)	Cal. F	INX	DeKalb 131	2	2	3	1	3	3	3	1	3	2
DeKalb, Ill. (Ferme Avicole, Ont.).....	C. C.	INX	DeKalb 131	2	1	1	2	2	3	4	1	2	2
Brandenburg, Fla.	Fla.	INX	DeKalb 131	3	2	2	1	3	4	4	1	3	2
DeKalb, Ill. (Mak's, Kansas).....	Kansas	INX	DeKalb 131		2	1	1	2	4	4	1	3	1
DeKalb, Ill. (Winthrop, Minn.).....	Minn.	INX	DeKalb 131	2	2	1	1	2	3	3	1	3	1
DeKalb, Ill. (Olson's, Mo.)	Mo.	INX	DeKalb 131	1	1	2	2	1	3	3	1	3	1
DeKalb, Ill. (Schubkegel, N. J.).....	N. J.	INX	DeKalb 131	1	1	1	3	2	2	2	1	4	1
DeKalb, Ill.	Penna.	INX	DeKalb 131	2	2	1	1	2	3	3	1	3	1
DeKalb, Ill.	Texas	INX	DeKalb 131	3	2	1	3	2	4	4	2	4	2
DeKalb, Ill. (Rice Lake & Stark, Wisc.)	Wisc.	INX	DeKalb 131	3	2	2	2	3	3	3	2	3	3
DeKalb Agricultural Assoc., Sycamore, Ill.													
DeKalb, Ill. (Pierson-Craddock, Tex.)	Cal. C	INX	DeKalb 151		4	3		3	2	3		2	1
DeKalb, Ill. (Pierson-Craddock, Tex) & (Badger, Wisc.).....	Cal. F	INX	DeKalb 151	3	3	2	3	1	2	2	2	2	2
Musselwhite, Fla.	Fla.	INX	DeKalb 151	1	1	2	1	1	2	2	1	2	2
DeKalb, Ill.	Mo.	INX	DeKalb 151	3	3	3	1	1	2	2	2	2	3
DeKalb, Ill.	CNY	INX	DeKalb 151	2	2	3	3	3	2	2	1	3	3
DeKalb, Ill. (All Star Mills, N. C.)....	N. C.	INX	DeKalb 151	3	3	1	1	1	2	2	2	1	2
DeKalb, Ill.	Tenn.	INX	DeKalb 151	3	2	3	1	3	2	2	1	2	3
Pierson-Craddock, Texas	Texas	INX	DeKalb 151	4	4	2	2	3	2	2	4	1	1
Grigsby, Texas	Texas	INX	DeKalb 151	4	4	1	2	3	3	3	2	2	2
DeKalb, Ill. (Badger, Wisc.)	Wisc.	INX	DeKalb 151	2	1	2	3	2	1	1	1	3	2
Demler Farms, Anaheim, California													
Demler, Cal. (Ceres, Cal.)	Cal. C	Syn x WL BX	Demler Kross		1	2		1	2	2		4	3
Demler, Cal. (Ceres, Cal.)	Cal. F	Syn x WL BX	Demler Kross	2	2	1	1	1	2	2	2	3	3
Demler, Cal.	Mo.	Syn x WL BX	Demler Kross	3	3	2	1	2	3	3	3	3	3
Demler, Cal. (Raleigh Hatch, N. C.)...	N. C.	Syn x WL BX	Demler Kross	2	3	2	3	3	4	4	2	4	4
Kingsley, Penna.	Penna.	Syn x WL BX	Demler Kross	3	3	1	3	2	4	3	2	4	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

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Demler Farms, Anaheim, California														
Demler, Cal. (Ceres, Cal.)	Cal. C	WL	SX	Demler Regal		3	1		3	3	2		3	2
Demler, Cal. (Ceres, Cal.)	Cal. F	WL	SX	Demler Regal	3	3	2	2	2	3	3	2	3	3
Tri-States, Fla.	Fla.	WL	SX	Demler Regal	2	2	1	2	1	2	2	2	2	2
Demler, Cal.	Iowa	WL	SX	Demler Regal		2	1	2	2	4	4		3	2
Demler, Cal. (Yeiser, Ky.)	Minn.	WL	SX	Demler Regal	2	3	3	4	2	4	4	2	2	3
Demler, Cal. (Melini, N. J.)	N. J.	WL	SX	Demler Regal	2	2	1	1	3	2	3	2	3	3
Demler, Cal.	CNY	WL	SX	Demler Regal	2	2	1	3	2	3	3	2	2	2
Wallis, Penna.	Penna.	WL	SX	Demler Regal	3	3	1	2	3	2	3	3	4	1
Demler, Cal.	R. I.	WL	SX	Demler Regal	3	3	2	1	3	2	2	2	2	2
Yeiser, Ky.	Tenn.	WL	SX	Demler Regal	3	2	1	1	3	3	3	1	3	1
Demler, Cal.	Texas	WL	SX	Demler Regal	2	3	1	3	2	3	3	3	2	1
Demler, Cal.	Wisc.	WL	SX	Demler Regal	3	3	2	1	3	2	2	3	3	3
DeWitt's Hatchery, Nacogdoches, Texas														
DeWitt's, Texas	Texas	WL	SX	HD-300	2	2	3	3	2	3	2	3	3	4
deZeeuw Leghorn Breeder, So. Edmonton, Alta.														
deZeeuw, Alta.	Alta.	WL	SX	deZeeuw 621	1	1	3	1	1	4	3	1	3	2
deZeeuw Leghorn Breeder, So. Edmonton, Alta.														
deZeeuw, Alta.	Alta.	WL	SX	752	2	2	3	1	3	3	2	3	2	4
deZeeuw, Alta.	B. C.	WL	SX	752	2	3	3	4	1	3	2	3	3	3
deZeeuw, Alta.	C. C.	WL	SX	752	3	3	3	4	3	3	3	2	1	2
Dryden Farms, Inc., Modesto, California														
Orange Blossom, Fla.	Fla.	WL	SX	SX 60	2	2	3	2	1	1	1	2	3	3
Early Hatcheries, Saskatoon, Saskatchewan														
Early, Sask.	C. C.	WL(RIRxLS)		Hi Layers	3	3	2	4	4	3	3	3	3	2
Eby's Poultry Farm, Carrollton, Texas														
Eby's, Texas	Mo.	WL	IN	#681 Hybrids	3	2	2	2	1	3	3	4	3	1
Eby's, Texas	N. C.	WL	IN	#681 Hybrids	2	2	3	1	3	2	2	2	4	2
Eby's, Texas	Texas	WL	IN	#681 Hybrids	1	1	3	1	1	2	3	1	3	2
Elander, P., Balcarres, Saskatchewan														
Elander, Sask.	C. C.	WL	SX	Starline	3	2	2	3	2	3	3	3	3	4
Erath Egg Farm, Stephenville, Texas														
Erath, Texas	Texas	WL	SX	Erath Str. X	1	1	1	1	2	1	2	1	4	3
Evans, F. H., Abbotsford, B. C.														
Evans, B. C.	C. C.	WL	SX	Echo Leghorns	1	1	4	2	3	2	1	2	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

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Evans, W. D. Hatchery, Northampton, England													
Evans, England	Mo.	WL SX	Maxilay	3	2	4	3	1	3	2	3	3	2
Evans, England	N. J.	WL SX	Maxilay	4	3	4	3	1	4	3	3	3	3
Evans, England	R. I.	WL SX	Maxilay	1	1	3	2	1	4	3	1	2	4
Evans, England	Tenn.	WL SX	Maxilay	3	3	4	3	3	3	3	3	3	4
Evans, England	Texas	WL SX	Maxilay	3	2	3	4	2	2	3	2	3	4
Fisher Poultry Farm, Ayton, Ontario													
Fisher, Ont.	B. C.	WL SX	103	2	3	2	1	1	1	1	3	2	3
Fisher, Ont.	C. C.	WL SX	103	2	2	2	2	2	2	1	2	1	2
Fletcher Hatchery, Concord, North Carolina													
Fletcher, N. C.	N. C.	WL SX	FX 100	4	4	4	1	1	2	2	4	2	3
Forsgate Farms, Jamesburg, New Jersey													
Forsgate, N. J.	Cal. C	WL SX	F 160		2	4		2	3	2		1	2
Forsgate, N. J.	Cal. F	WL SX	F 160	2	2	4	2	2	2	2	2	1	2
Forsgate, N. J.	N. J.	WL SX	F 160	2	2	4	1	1	2	2	2	1	3
Forsgate, N. J.	CNY	WL SX	F 160	3	3	3	1	3	3	2	3	2	4
Forsgate, N. J.	Penna.	WL SX	F 160	1	2	3	2	2	2	2	2	2	3
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Cal. C	CGxWL BX	Gray Leghorn		1	3		1	1	1		3	1
Garber, Cal.	Cal. F	CGxWL BX	Gray Leghorn	2	2	1	1	2	2	2	2	3	3
Garber, Cal.	Mo.	CGxWL BX	Gray Leghorn	2	2	1	2	2	2	2	2	4	1
Garber, Cal.	Penna.	CGxWL BX	Gray Leghorn	1	1	1	3	1	3	2	1	3	3
Garber Poultry Breeding Farm, Modesto, California													
Garber, Cal.	Cal. C	WL SX	G 200		3	1		2	3	2		1	1
Garber, Cal.	Cal. F	WL SX	G 200	2	2	2	1	3	3	2	2	1	2
Garber, Cal.	N. J.	WL SX	G 200	2	2	2	3	2	2	1	2	1	1
Garber, Cal.	Penna.	WL SX	G 200	2	3	2	1	3	3	2	2	1	1
Garber, Cal.	Texas	WL SX	G 200	3	3	3	2	3	1	2	3	1	1
Garber, Cal.	Wisc.	WL SX	G 200	1	3	2	1	2	2	1	1	1	1
Garrison, Earl W., Bridgeton, New Jersey													
Garrison, N. J.	Penna.	RIRxWR BX	Golden Sex Link	4	4	3	3	3	1	1	4	2	2
Gasson's Poultry Farm, Versailles, Ohio													
Gasson, Ohio	Mo.	WL SX	G 33	2	2	2	2	2	3	3	2	2	4
Gasson, Ohio	Wisc.	WL SX	G 33	3	3	2	2	3	3	2	3	1	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

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Ghostley's Poultry Farm, Anoka, Minnesota														
Ghostley, Minn. (Santa Clara, Cal.) & (Northwest Fms., Ore.)	Cal. C	WL	SX	Ghostley Pearl		3	3		2	3	4		1	3
Ghostley, Minn. (Santa Clara, Cal.) & (Northwest Fms., Ore.)	Cal. F	WL	SX	Ghostley Pearl	2	2	3	3	3	2	2	2	1	4
Ghostley, Minn. (Bailey, Ont.)	C. C.	WL	SX	Ghostley Pearl	3	3	2	1	3	2	2	2	1	3
Voscinar, Fla.	Fla.	WL	SX	Ghostley Pearl	2	3	3	4	1	1	1	3	1	3
Ghostley, Minn.	Iowa	WL	SX	Ghostley Pearl		3	2	1	4	3	3		3	1
Ghostley, Minn. (Weber & Berry, Kans)	Kansas	WL	SX	Ghostley Pearl		4	4	3	3	3	4	4	2	1
Ghostley, Minn.	Minn.	WL	SX	Ghostley Pearl	3	3	1	3	4	1	1	3	1	1
Ghostley, Minn.	Mo.	WL	SX	Ghostley Pearl	2	2	3	3	2	2	2	2	2	2
Ghostley, Minn.	N. H.	WL	SX	Ghostley Pearl	3	2	2	3	2	4	3	3	2	2
Ghostley, Minn. (Hershey, Pa.)	CNY	WL	SX	Ghostley Pearl	2	2	3	1	1	2	2	3	2	3
Ghostley, Minn. (Beamsdale, N. C.)	N. C.	WL	SX	Ghostley Pearl	2	2	4	1	2	2	2	3	2	2
Wheelock, Penna.	Penna.	WL	SX	Ghostley Pearl	3	3	1	3	3	3	3	2	2	1
Ghostley, Minn.	R. I.	WL	SX	Ghostley Pearl	3	3	2	1	3	2	2	3	1	2
Ghostley, Minn.	Tenn.	WL	SX	Ghostley Pearl	3	3	3	3	2	2	2	4	2	1
Ghostley, Minn.	Texas	WL	SX	Ghostley Pearl	2	2	2	3	3	1	1	2	2	1
Ghostley, Minn. (Rindfleisch & Weidner, Wis.)	Wisc.	WL	SX	Ghostley Pearl	2	2	2	2	2	3	3	3	3	1
Goertz, Dan K., Fresno 2, California														
Goertz, Cal. (Kruger's, Cal.)	Cal. C	WL	SX	Goertz		3	3		2	1	1		2	3
Goertz, Cal. (Kruger's, Cal.)	Cal. F	WL	SX	Goertz	3	4	3	3	2	1	1	3	2	3
Goodine, G. A., Lower Southhampton, New Brunswick														
Goodine, N. B.	N. B.	RIRxWL	BX	Goodine	1	2	3	2	1	1	1	2	4	2
Great Plains Hatcheries, Effingham, Illinois														
Great Plains, Ill.	Mo.	WL	SX	Great Plains	3	3	2	1	2	3	4	3	4	3
Groupe Maska, St. Hyacinthe, Quebec														
St. Augustin, Que.	B. C.	WL	SX	Corvette A1	2	2	3	3	3	1	1	2	2	3
Groupe Maska, Que.	C. C.	WL	SX	Corvette A1	1	1	2	2	2	2	1	1	1	2
Groupe d' Oka, Oka Two Mountains, Quebec														
Groupe d'Oka, Que.	C. C.	WL	SX	Oka 93	2	3	2	2	3	1	1	2	3	2
Hansen's Leghorn City, Puyallup, Washington														
Hansen, Wash.	B. C.	WL	SX	Criss Cross H 25	2	2	4	1	2	3	3	2	2	2
Hansen, Wash. (Patton, Wash. & Ward, Cal.)	Cal. C	WL	SX	Criss Cross H 25		3	4		3	4	4		3	3
Hansen, Wash. (Patton, Wash. & Ward, Cal.)	Cal. F	WL	SX	Criss Cross H 25	3	3	3	2	4	4	4	3	2	3
Hansen, Wash.	Mo.	WL	SX	Criss Cross H 25	2	2	2	1	3	3	3	3	3	3
Hansen, Wash.	Penna.	WL	SX	Criss Cross H 25	2	2	1	1	2	3	3	1	1	3
Hansen, Wash. (Young, Wisc.)	Wisc.	WL	SX	Criss Cross H 25	3	3	3	3	2	4	3	3	2	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING		STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Hansen's Leghorn City, Puyallup, Washington														
Hansen, Wash. (Stewart, Alta.)	Alta.	WL	SX	Criss Cross 61	3	3	4	2	3	3	3	3	2	3
Hansen, Wash.	Tenn.	WL	SX	Criss Cross 61	2	2	2	2	2	1	2	2	2	3
Hanson, J. A. & Son, Corvallis, Oregon														
Hanson, Ore.	Penna.	WL	SX	Super Nick	4	4	2	3	3	4	3	4	3	4
Hanson, Ore.	Tenn.	WL	SX	Super Nick	4	4	2	4	4	4	4	4	2	3
Hanson, J. A. & Son, Corvallis, Oregon														
Hanson, Ore.	N. J.	WL	SX	Super Nick A	4	4	2	4	4	4	4	4	2	4
Harco Orchards & Poultry Farm, So. Easton, Mass.														
Harco, Mass.	N. C.	RIR	PS	Group I	3	3	4	1	3	1	1	4	3	1
Harco Orchards & Poultry Farm, So. Easton, Mass.														
Harco, Mass.	N. H.	RIRxBPR		Sex Link	1	1	2	2	1	1	1	1	2	2
Harco, Mass.	CNY	RIRxBPR		Sex Link	1	2	2	1	1	1	1	3	3	2
Harco, Mass.	Penna.	RIRxBPR		Sex Link	1	2	3	3	2	1	1	3	2	2
Harco, Mass.	R. I.	RIRxBPR		Sex Link	2	2	2	1	2	1	1	3	2	1
Hardy, C. Nelson & Son, Essex, Massachusetts														
Hardy, Mass.	N. H.	RIRxBPR		Sex Link	2	3	3	2	3	2	2	3	3	3
Heisdorf & Nelson Farms, Kirkland, Washington														
H & N, Wash.	B. C.	WL	SX	Nick Chick	2	3	3	1	2	1	1	2	1	2
H & N, Wash. (Wash. Br., Wash.& H&N, Cal.)	Cal. C	WL	SX	Nick Chick		4	3		3	2	2		1	3
H & N, Wash. (Wash. Br., Wash. &H&N, Cal.)	Cal. F	WL	SX	Nick Chick	2	3	3	3	4	2	1	2	1	3
Oak Crest, Fla.	Fla.	WL	SX	Nick Chick	1	1	3	1	2	2	2	1	1	3
Pine Acres, Fla.	Fla.	WL	SX	Nick Chick	2	1	1	2	1	3	3	3	2	3
H & N, Wash.	Iowa	WL	SX	Nick Chick		2	2	4	2	3	4		2	2
H & N, Wash. (Reimer, Kans.)	Kansas	WL	SX	Nick Chick		3	2	3	3	2	1	4	2	2
H & N, Wash. (Mo-Ark's, Mo.)	Mo.	WL	SX	Nick Chick	2	2	2	1	1	3	3	3	1	4
H & N, Wash, (Taub, N. J.)	N. J.	WL	SX	Nick Chick	1	1	1	2	1	2	3	2	2	1
H & N, Wash, (Rich, N. Y.)	CNY	WL	SX	Nick Chick	1	1	1	1	1	3	3	1	2	2
H & N, Wash, (Castleberry, N. C.)	N. C.	WL	SX	Nick Chick	2	2	2	3	2	3	3	2	2	2
Florin, Penna.	Penna.	WL	SX	Nick Chick	3	3	2	3	3	3	2	3	2	1
H & N, Wash. (Strain, Ga.)	Tenn.	WL	SX	Nick Chick	2	2	3	2	1	2	1	1	2	1
Atwood, Texas	Texas	WL	SX	Nick Chick	2	2	1	3	3	3	2	3	1	3
Vance, Texas	Texas	WL	SX	Nick Chick	3	3	3	3	3	1	1	3	2	1
Williams, Texas	Texas	WL	SX	Nick Chick	1	1	3	2	1	2	1	2	1	3
H & N, Wash. (Slette, Wisc.)	Wisc.	WL	SX	Nick Chick	3	2	1	3	2	4	4	2	2	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Heisdorf & Nelson Farms, Kirkland, Washington													
Frizzell, Fla.	Fla.	WL SX	Mark II	2	2	3	2	3	1	2	2	2	3
H & N, Wash. (Simmonds, Minn.)	Minn.	WL SX	Mark II	2	2	3	3	2	1	2	2	1	4
H & N, Wash. (Motter, Mo.)	Mo.	WL SX	Mark II	1	1	2	1	2	2	2	1	1	2
H & N, Wash. (Ervings, Tenn.)	Tenn.	WL SX	Mark II	2	2	2	4	2	3	3	3	1	1
H & N, Wash. (Hales Corners, Wisc.) & (Klongland, Wisc.)	Wisc.	WL SX	Mark II	1	1	2	3	1	2	2	1	2	3
Heisdorf & Nelson Farms, Kirkland, Washington													
H & N, Wash. (H & N, Cal.)	Cal. C	Syn x WL	Breed Cross		1	2		1	1	1		4	2
H & N, Wash. (H & N. Cal.)	Cal. F	Syn x WL	Breed Cross	2	2	2	1	2	1	1	2	3	2
Heisey Leghorn Farms, Mt. Joy, Pennsylvania													
Heisey, Penna.	Penna	WL SX	H-K-Cross	2	3	2	3	2	2	2	3	4	3
Hill Top Poultry Farm, Hawley, Pennsylvania													
Hill Top, Penna.	Penna.	WL SX	285-B	2	3	4	1	1	2	3	3	2	2
Honegger Breeder Hatchery, Forrest, Illinois													
Honegger, Ill.	B. C.	WL SX	Honegger Layer	1	1	2	2	1	2	1	1	3	1
Honegger, Ill. (Anderson, Cal. & Kirks, Ore.)	Cal. C	WL SX	Honegger Layer		3	3		2	3	3		2	3
Honegger, Ill. (Anderson, Cal. & Kirks, Ore.)	Cal. F	WL SX	Honegger Layer	2	2	3	4	2	2	2	2	2	3
Fla. Hen Ranch, Fla.	Fla.	WL SX	Honegger Layer	3	3	4	2	2	3	3	3	3	3
Browder, Fla.	Fla.	WL SX	Honegger Layer	1	1	2	1	1	4	4	3	3	2
Honegger, Ill.	Mo.	WL SX	Honegger Layer	2	1	1	1	2	3	3	2	2	1
Honegger, Ill. (Parenti, N. J.)	N. J.	WL SX	Honegger Layer	2	1	2	2	1	2	2	2	4	3
Honegger, Ill. (Carson, N. Y.)	CNY	WL SX	Honegger Layer	2	2	2	1	1	3	3	2	4	4
Honegger, Ill. (FCX, N. C.)	N. C.	WL SX	Honegger Layer	2	1	1	4	2	3	3	2	2	3
Honegger, Ill.	R. I.	WL SX	Honegger Layer	1	1	2	2	2	3	3	1	1	3
Honegger, Ill.	Tenn.	WL SX	Honegger Layer	2	2	3	3	3	3	3	2	4	3
Flinn, Texas	Texas	WL SX	Honegger Layer	2	2	1	2	4	2	2	2	2	2
Honegger, Ill. (Sunnyside, Wisc.)	Wisc.	WL SX	Honegger Layer	1	1	2	2	2	3	3	1	3	2
Honegger Breeder Hatchery, Forrest, Illinois													
Honegger, Ill.	Mo.	WL SX	Honegger Layer 62	2	2	2	1	2	3	4	2	2	3
Honegger Farms Co., Inc., Forrest, Illinois													
Pine Air, Fla.	Fla.	Syn x WL	Honegger H-80	3	3	1	1	3	3	3	3	4	2
Honegger, Ill.	N. H.	Syn x WL	Honegger H-80	2	1	1	3	2	4	4	1	4	1
Honegger, Ill.	Tenn.	Syn x WL	Honegger H-80	3	2	2	2	3	2	3	4	3	3
Honegger, Ill. (Sunnyside, Wisc.)	Wisc.	Syn x WL	Honegger H-80	1	1	1	1	2	2	2	1	4	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Hubbard Farms, Walpole, New Hampshire													
Hubbard, N. H. (Hubbard, Pa.).....	Cal. C	Syn x NH	Comet		3	2		3	3	4		3	1
Hubbard, N. H. (Hubbard, Pa.).....	Cal. F	Syn x NH	Comet	3	3	2	3	3	3	3	3	3	2
Hubbard, N. H.	N. H.	Syn x NH	Comet	2	2	1	2	1	4	4	2	2	2
Hubbard, N. H.	CNY	Syn x NH	Comet	2	2	1	1	3	3	3	2	4	1
Hubbard, Penna.	Penna.	Syn x NH	Comet	2	2	1	2	2	2	2	3	3	2
Hubbard, N. H.	R. I.	Syn x NH	Comet	3	3	1	3	4	3	3	3	3	1
Hy-Line Poultry Farm, Des Moines, Iowa													
Hy-Line, Iowa (HyLay, Texas) & (Jamieson, Colo.).....	Cal. C	INX	Hy-Line 934-H		1	1		1	2	2		4	1
Hy-Line, Iowa (HyLay, Texas) & (Jamieson, Colo.).....	Cal. F	INX	Hy-Line 934-H	1	1	2	4	2	2	2	1	4	1
Hy-Line, Iowa (Pioneer, Man.).....	C. C.	INX	Hy-Line 934-H	1	1	1	1	2	3	2	1	4	1
Corrigan-Gonzalez, Fla.	Fla.	INX	Hy-Line 934-H	1	1	1	3	2	2	2	1	4	1
Hy-Line, Iowa	Iowa	INX	Hy-Line 934-H		1	1	1	1	1	1		4	1
Coombs, Kans.	Kansas	INX	Hy-Line 934-H		1	2	1	1	3	3	1	4	1
Hy-Line, Iowa (Hy-Line, Minn.).....	Minn.	INX	Hy-Line 934-H	1	1	1	2	1	1	1	1	4	1
Hy-Line, Iowa	Mo.	INX	Hy-Line 934-H	1	1	1	1	2	2	2	1	4	1
Hy-Line, Iowa	N. H.	INX	Hy-Line 934-H	3	2	1	1	1	4	3	2	4	1
Hy-Line, Iowa (Hy-Line & Johnston, Ia.)	N. J.	INX	Hy-Line 934-H	2	2	2	3	2	1	1	2	4	3
Hy-Line, Iowa (Neuhauser, N. Y.).....	CNY	INX	Hy-Line 934-H	1	1	1	1	1	2	2	1	4	2
Hy-Line, Iowa (Tar Heel, N. C.).....	N. C.	INX	Hy-Line 934-H	1	1	1	2	1	3	3	1	4	1
Hy-Line, Iowa	R. I.	INX	Hy-Line 934-H	1	1	1	2	2	2	3	1	3	3
Hy-Line, Iowa (Smith, Tenn.).....	Tenn.	INX	Hy-Line 934-H	3	3	1	2	3	2	2	2	4	1
Hy-Lay, Texas	Texas	INX	Hy-Line 934-H	1	1	1	2	1	1	1	1	4	2
Kazmeier, Texas	Texas	INX	Hy-Line 934-H	2	2	1	2	2	2	2	1	4	1
Wilson, Texas	Texas	INX	Hy-Line 934-H	2	1	1	2	2	2	2	1	3	3
Hy-Line, Iowa (Preston, Wisc.).....	Wisc.	INX	Hy-Line 934-H	1	1	1	2	2	2	2	1	4	3
Hy-Line Poultry Farm, Des Moines, Iowa													
Hy-Line, Iowa(Momm, & Poehlmann, Cal.)	Cal. C	INX	Hy-Line 934-F		2	2		2	2	2		3	1
Hy-Line, Iowa(Momm, & Poehlmann, Cal.)	Cal. F	INX	Hy-Line 934-F	2	2	2	3	1	1	1	1	3	2
Wallace, Fla.	Fla.	INX	Hy-Line 934-F	3	3	2	1	3	2	2	1	3	1
Hy-Line, Iowa	Mo.	INX	Hy-Line 934-F	1	1	2	1	1	2	2	1	3	3
Wallace, Penna.	Penna.	INX	Hy-Line 934-F	2	2	2	3	2	2	2	1	4	2
Hy-Line, Iowa (Smith, Tenn.).....	Tenn.	INX	Hy-Line 934-F	4	4	3	2	3	1	2	3	3	3
Hy-Line, Iowa (Preston, Wisc.).....	Wisc.	INX	Hy-Line 934-F	3	3	2	2	2	1	1	1	3	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Hy-Line Poultry Farm, Des Moines, Iowa													
Zollicker, Mo. (Hy-Line, Iowa).....	Mo.	INX	Hy-Line 950	2	2	2	1	3	2	2	1	3	2
Ideal Hatchery & Poultry Farm, Cameron, Texas													
Ideal, Texas (White, Cal.) & (D & C, Texas)	Cal. C	WL	SX Ideal H-3-W		4	4		3	1	2		2	3
Ideal, Texas (White, Cal.) & (D & C, Texas)	Cal. F	WL	SX Ideal H-3-W	2	3	3	2	2	1	1	2	2	3
Poultry Products, Fla.	Fla.	WL	SX Ideal H-3-W	4	4	4	3	4	1	1	3	3	4
Ideal, Texas	Iowa	WL	SX Ideal H-3-W		3	3	4	3	3	3		3	3
Ideal, Texas (Jack Frost, Minn.).....	Minn.	WL	SX Ideal H-3-W	3	3	4	4	3	2	1	3	2	3
Ideal, Texas	Mo.	WL	SX Ideal H-3-W	2	2	2	2	3	2	2	2	3	3
Ideal, Texas	N. J.	WL	SX Ideal H-3-W	3	3	4	3	2	2	2	3	4	2
Ideal, Texas	CNY	WL	SX Ideal H-3-W	1	2	2	2	1	3	2	1	3	3
Ideal, Texas (Asheville, N. C.).....	N. C.	WL	SX Ideal H-3-W	3	3	3	4	3	2	2	3	2	4
Ideal, Texas	Penna.	WL	SX Ideal H-3-W	3	3	1	3	3	2	2	1	4	3
Ideal, Texas	R. I.	WL	SX Ideal H-3-W	1	1	2	1	3	3	3	1	4	3
Ideal, Texas	Tenn.	WL	SX Ideal H-3-W	2	2	3	2	1	2	2	3	3	2
Golden Oak, Texas	Texas	WL	SX Ideal H-3-W	4	4	3	2	3	4	3	4	3	3
Ideal, Texas	Texas	WL	SX Ideal H-3-W	3	4	2	4	4	1	2	2	3	2
D & C, Texas	Texas	WL	SX Ideal H-3-W	2	3	3	2	3	1	1	2	2	3
Ideal, Texas (Jack Frost, Minn.).....	Wisc.	WL	SX Ideal H-3-W	2	2	3	3	2	2	2	2	3	4
Ideal Hatchery & Poultry Farm, Cameron, Texas													
Dirkse, Mich. (Ideal, Texas).....	Mo.	WL	SX Ideal Cross	2	2	3	1	2	2	2	2	3	4
Dirkse, Mich. (Ideal, Texas).....	R. I.	WL	SX Ideal Cross	2	3	2	1	3	1	2	1	3	4
Kahn, Max, Toms River, New Jersey													
Kahn, N. J.	N. J.	WL	SX Kahn	3	3	4	2	3	1	2	3	2	1
Kerr, Dr., Hatcheries, Minneota, Minnesota													
Dr. Kerr, Minn.	Cal. C	WL	IN 409 C		2	1		3	2	2		1	3
Dr. Kerr, Minn.	Cal. F	WL	IN 409 C	2	2	1	2	3	2	2	2	1	3
Dr. Kerr, Minn.	Mo.	WL	IN 409 C	2	2	3	2	2	4	4	2	3	1
Dr. Kerr, Minn.	Wisc.	WL	IN 409 C	1	1	1	3	2	3	3	1	2	1
Keystone Poultry Breeding Farm, Terre Hill, Penna.													
Keystone, Penna.	CNY	WL	SX Park's Keystone	3	3	3	4	3	3	2	2	2	2
Parks, Penna.	Penna.	WL	SX Park's Keystone	4	3	3	3	3	3	3	3	2	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Kimber Farms, Inc., Fremont, California													
Kimber, Cal. (Barrhead Elect., Alta.).	Alta.	WL SX	Kimber K 137	2	2	1	4	1	2	2	2	1	1
Kimber, Cal. (Sanger & Pomona, Cal.)	Cal. C	WL SX	Kimber K 137		2	2		1	3	4		1	2
Kimber, Cal. (Sanger & Pomona, Cal.)	Cal. F	WL SX	Kimber K 137	2	2	2	3	1	1	1	2	1	3
Florida State, Fla.	Fla.	WL SX	Kimber K 137	2	3	1	2	3	1	1	1	1	2
Kimber, Cal.	Iowa	WL SX	Kimber K 137		2	2	3	2	1	2		1	2
Kimber, Cal. (Lincoln, B & C, & Behymer-Sedgwick, Kans.)	Kansas	WL SX	Kimber K 137		1	2	1	2	3	2	2	1	1
Kimber, Cal. (Kimber, Minn.).....	Minn.	WL SX	Kimber K 137	2	2	2	1	2	2	2	3	1	3
Kimber, Cal. (Mo-Valley, Mo.).....	Mo.	WL SX	Kimber K 137	2	2	2	2	1	3	3	2	1	3
Kimber, Cal.	N. H.	WL SX	Kimber K 137	3	2	1	1	2	3	3	2	1	1
Kimber, Cal. (Marshall, N. Y.).....	CNY	WL SX	Kimber K 137	2	2	2	3	1	2	2	2	1	2
Kimber, Cal. (Hubbard, N. C.)	N. C.	WL SX	Kimber K 137	2	2	2	3	2	2	2	2	1	2
Hubbard, Penna.	Penna.	WL SX	Kimber K 137	1	2	1	1	2	2	3	1	2	3
Kimber, Cal.	R. I.	WL SX	Kimber K 137	2	2	2	3	3	2	2	1	1	2
Kimber, Cal. (Nichols, Tenn.).....	Tenn.	WL SX	Kimber K 137	3	4	3	1	3	2	2	4	1	3
Western, Texas	Texas	WL SX	Kimber K 137	3	3	3	2	2	2	2	4	1	2
Kimber, Cal. (Wilke, Wisc.)	Wisc.	WL SX	Kimber K 137	2	2	1	1	2	3	3	3	1	2
Kimber Farms, Inc., Fremont, California													
Kimber, Cal. (Kimber, Sanger, Cal.)...	Cal. C	WL SX	Kimber K 141		3	3		3	2	2		2	3
Kimber, Cal. (Kimber, Sanger, Cal.)...	Cal. F	WL SX	Kimber K 141	2	2	2	1	2	3	3	2	2	4
Kimber Farms, Inc., Fremont, California													
Kimber, Cal.	B. C.	WL SX	Kimber K 155	1	2	1	2	2	2	1	3	1	2
Miami International, Fla.	Fla.	WL SX	Kimber K 155	3	3	1	2	3	1	2	3	1	2
Bloomingdale, Fla.	Fla.	WL SX	Kimber K 155	1	1	1	2	1	3	2	1	1	1
Kimber, Cal. (Mo-Valley, Mo.).....	Mo.	WL SX	Kimber K 155	3	2	2	3	1	3	3	3	2	1
Kimber, Cal. (Dover, N. J.).....	N. J.	WL SX	Kimber K 155	3	2	1	1	2	2	2	3	2	2
Longenecker's, Penna.	Penna.	WL SX	Kimber K 155	3	3	1	2	3	3	3	2	3	1
Kimber, Cal. (Faust, Ala.)	Tenn.	WL SX	Kimber K 155	2	2	1	2	3	3	2	3	1	2
Western, Texas	Texas	WL SX	Kimber K 155	2	1	1	3	3	4	4	2	1	3
Kimber, Cal. (Meadowview, Wisc.) ...	Wisc.	WL SX	Kimber K 155	2	1	2	3	3	3	3	2	1	3
Kingstowne Poultry Farm, Kingston, Rhode Island													
Kingstowne, R. I.	R. I.	WRxRIR	Silver King Cross	4	4	4	1	2	3	4	4	1	2
Klongland Hatchery, Stoughton, Wisconsin													
Klongland, Wisc.	Wisc.	CGxWL BX	K Cross	1	1	2	1	1	2	2	2	3	1
Lambert, P. B. Farm, Bright, Ontario													
Lambert, Ont.	C. C.	WL SX	M & H	2	3	3	3	3	3	3	2	2	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Law, H. A., Hatfield Pt., New Brunswick													
Law, N. B.	N. B.	RIR(RIRxLS)	Law	3	4	2	3	2	2	3	3	2	3
Law, H. A., Hatfield Pt., New Brunswick													
Law, N. B.	N. B.	WL(LSxRIR)	Law	1	1	1	2	4	3	2	1	4	1
Lawton, A. C. & Sons, Foxboro, Massachusetts													
Great Plains, Ill.	Mo.	RIRxWPR	Buff Sex Link	3	3	3	4	1	1	1	3	3	1
Lawton, Mass.	N. H.	RIRxWPR	Buff Sex Link	2	3	4	3	1	1	1	3	2	3
Lawton, Mass.	CNY	RIRxWPR	Buff Sex Link	2	3	3	3	1	1	1	3	4	1
Lawton, Mass.	Penna.	RIRxWPR	Buff Sex Link	2	3	3	3	3	1	1	3	4	4
Lawton, Mass.	R. I.	RIRxWPR	Buff Sex Link	3	3	4	2	1	1	1	3	2	3
Leader, Guy A. & Sons, Inc., York, Pennsylvania													
Leader, Penna.	N. J.	WL SX	8X	4	4	4	4	4	1	1	4	1	3
Leader, Penna.	Penna.	WL SX	8X	2	2	3	4	2	3	3	3	2	2
Leader, Guy A. & Sons, Inc., York Pennsylvania													
Leader, Penna.	CNY	WL SX	10X	3	3	3	1	2	2	2	3	1	4
Leader, Guy A. & Sons, Inc., York Pennsylvania													
Leader, Penna.	Penna.	WL SX	14X	1	1	3	2	1	3	3	3	1	2
Lone Pine Farm, Berwick, Nova Scotia													
Lone Pine, N. S.	C. C.	(RIRxLS)xWL	Lone Pine 161	2	2	3	2	2	1	1	4	3	2
MacDonald, C. E., Cody's, New Brunswick													
MacDonald, N. B.	N. B.	RIRx(LSxRIR)	MacDonald	4	4	2	1	2	2	3	4	3	3
Macdonald & Vriends, Covehead Road, Prince Edward Is.													
Macdonald & Vriends, P. E. I.	C. C.	WL SX	Mac 300	3	2	2	2	2	4	3	3	1	2
Manitoba ROP Hatchery, Winnipeg, Manitoba													
Manitoba ROP, Man.	Alta.	WL SX	Keyling 110A	2	2	1	4	2	3	2	2	2	3
Manitoba ROP, Man.	C. C.	WL SX	Keyling 110A	2	2	2	4	2	2	2	2	2	3
Mathews Poultry Farm, Burlington, Wisconsin													
Mathews, Wisc.	Wisc.	WL SX	M-138 F	3	3	3	2	2	3	4	3	1	3
McIsaac, J. Donald, East Florenceville, New Brunswick													
McIsaac, N. B.	N. B.	WL SX	Electric	4	2	3	4	4	4	4	2	2	1
McIsaac, J. Donald, East Florenceville, New Brunswick													
McIsaac, N. B.	N. B.	RIR(LSxNH)	McIsaac's 110	3	3	4	2	3	2	2	4	3	4
Meridian Poultry Farm & Hatchery, Cloverdale, B. C.													
Armstrong, B. C.	B. C.	WL SX	Meridian Leghorn	3	4	3	4	4	3	3	2	2	2
Nelson, George F., Truro, Nova Scotia													
Nelson, N. S.	N. B.	RIRxLS BX	Red x Sussex	3	4	1	1	1	1	2	4	3	4
Niles Poultry Breeding Farm, Niles California													
Niles, Cal.	Cal. C	WL SX	Niles		4	3		3	3	3		2	1
Niles, Cal.	Cal. F	WL SX	Niles	2	2	3	3	1	3	2	2	2	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Niles Poultry Breeding Farm, Niles, California													
Niles, Cal.	Cal. C	CGxWL BX	Commercial		1	2		4	3	3		3	2
Niles, Cal.	Cal. F	CGxWL BX	Commercial	3	2	2	2	2	3	3	3	3	2
Noble Bros., Orangeville, Ontario													
Noble, Ont.	C.I C.	WL SX	N-60	3	3	3	2	4	4	4	3	3	3
Norco Poultry Breeding Farm, Norco, California													
Norco, Cal.	Cal. C	WL PS	Grade AA		2	2		2	1	2		2	3
Norco, Cal.	Cal. F	WL PS	Grade AA	3	2	2	2	3	2	2	3	2	3
No. Central Regional Poultry Br. Lab., Lafayette, Indiana													
Purdue Univ., Ind.	Cal. C	WL PS	Reg. Cornell Contr.		3	3		3	4	4		2	3
Purdue Univ., Ind.	Cal. F	WL PS	Reg. Cornell Contr.	3	3	4	3	2	4	4	3	2	4
Purdue, Ind.	Fla.	WL PS	Reg. Cornell Contr.	4	4	3	4	4	4	4	4	1	4
Purdue, Ind.	Mo.	WL PS	Reg. Cornell Contr.	3	3	3	2	2	4	4	3	3	3
Randombred, Ind.	CNY	WL PS	Reg. Cornell Contr.	4	3	3	2	3	4	4	4	2	3
Purdue Univ., Ind.	N. C.	WL PS	Reg. Cornell Contr.	4	3	4	3	2	4	4	4	2	4
Purdue Univ., Ind.	Tenn.	WL PS	Reg. Cornell Contr.	3	3	2	3	3	3	3	4	2	3
Purdue, Ind.	Texas	WL PS	Reg. Cornell Contr.	3	2	3	1	2	4	4	3	2	4
Purdue, Ind.	Wisc.	WL PS	Reg. Cornell Contr.	4	4	3	3	4	4	4	4	2	2
No. Central Regional Poultry Br. Lab., Lafayette, Indiana													
No. Central Regional, Ind.	Cal. C	RIRxWL BX	Reg. Redx Cornell		3	3		1	3	3		2	3
No. Central Regional, Ind.	Cal. F	RIRxWL BX	Reg. Redx Cornell	4	3	3	1	2	3	3	4	3	2
No. Central Regional Poultry Br. Lab., Lafayette, Indiana													
No. Central Regional, Ind.	R. I.	RIR PS	Reg. Red Control	4	4	3	3	2	4	4	4	3	3
Peerless Hatchery, Spencer, Iowa													
Peerless, Iowa	Cal. C	WL SX	Peerless 262		3	3		3	3	3		2	2
Peerless, Iowa	Cal. F	WL SX	Peerless 262	2	2	3	3	3	3	3	3	2	3
Peerless, Iowa	Mo.	WL SX	Peerless 262	3	3	3	3	4	3	3	4	2	1
Penna. Farm Bureau Hatchery, Harrisburg, Penna.													
Penna. Fr. Bur., Penna.	CNY	WL SX	LSC 55	2	2	3	3	2	3	3	2	1	3
Penna. Fr. Bur., Penna.	Penna.	WL SX	LSC 55	2	3	3	3	3	3	3	1	1	1
Ind. F. B., Ind. (Ind. F. B., Lafayette, Ind.)	Wisc.	WL SX	LSC 55	4	3	2	2	4	4	4	4	2	1
Penna. Farm Bureau Hatchery, Harrisburg, Penna.													
Penna. Fr. Bur., Penna.	Penna.	WL SX	LSC 60	1	1	1	3	2	2	2	1	1	1
Pollard Farms, Tustin, California													
Pollard, Cal.	Cal. C	Syn x WL	Silver X Leghorn		3	2		3	2	3		2	3
Pollard, Cal.	Cal. F	Syn x WL	Silver X Leghorn	3	3	2	1	3	3	3	3	3	3

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Randall Hatchery & Breeding Farm, Montclair, California													
Randall, Cal.	Cal. C	CGxWL BX	Randall Gray x Leg.		3	2		3	2	3		2	3
Randall, Cal.	Cal. F	CGxWL BX	Randall Gray x Leg.	2	1	2	2	1	3	3	2	3	3
Rapp Leghorn Farm, Farmingdale, New Jersey													
Maple Leaf, Fla.	Fla.	WL SX	Rapp Linecross	2	3	3	4	2	2	1	3	3	3
Rapp, N. J.	Mo.	WL SX	Rapp Linecross	3	3	3	4	2	3	3	3	2	2
Rapp, N. J.	N. J.	WL SX	Rapp Linecross	2	2	2	1	1	3	3	3	3	3
Rapp, N. J.	CNY	WL SX	Rapp Linecross	3	3	2	3	2	3	3	3	3	2
Rapp, N. J. (Davis, N. C.)	N. C.	WL SX	Rapp Linecross	3	4	4	3	4	3	2	2	3	4
Rapp, N. J. (Ward's, Iowa)	Wisc.	WL SX	Rapp Linecross	3	3	3	2	4	2	2	2	3	3
Raynor, Ralph, Charlottetown, Prince Edward Island													
Raynor, P. E. I.	C. C.	WL SX	Raynor R-60	3	3	3	1	2	3	2	3	3	3
Raynor, P. E. I.	N. B.	WL SX	Raynor R-60	2	2	4	1	3	4	4	1	4	1
Richardson Poultry Br. Farm, Redlands, California													
Richardson, Cal.	Cal. C	WA BX	Commercial MWA		2	2		3	2	2		4	2
Richardson, Cal.	Cal. F	WA BX	Commercial MWA	4	3	3	4	2	3	3	3	3	2
Richardson Poultry Br. Farm, Redlands, California													
Richardson, Cal.	Cal. C	CGxWL BX	Richardson 724		3	3		4	4	4		4	3
Richardson, Cal.	Cal. F	CGxWL BX	Richardson 724	3	3	3	2	4	4	4	3	4	4
Riddle Spring Poultry Farm, Manchester, New Hampshire													
Riddle Spring, N. H.	N. H.	RIRxWR BX	Super-Triway	2	3	2	2	1	1	1	3	3	1
Riverside Hatchery, Knoxville, Tennessee													
Riverside, Tenn.	Tenn.	WL SX	Riverside SX	2	3	4	2	3	3	2	3	3	4
St. Augustin Cooperative Hatchery, St. Augustin, Quebec													
St. Augustin, Que.	Alta.	WL SX	Corvette	4	4	4	4	4	1	1	4	2	4
St. Augustin, Que.	C. C.	WL SX	Corvette	4	4	2	4	3	1	1	4	1	3
St. Augustin, Que.	N. B.	WL SX	Corvette	3	4	4	4	4	1	1	1	1	2
Ste. Martine Cooperative Hatchery, Ste. Martine, Quebec													
Ste. Martine	C. C.	WL SX	Chateauguay 83	3	3	2	3	3	3	3	3	2	1
Scattered Acres Hatchery, Hanover, Ontario													
Scattered Acres, Ont.	C. C.	WL(BLxLS)	Hanover 30	3	4	2	3	4	3	3	3	1	2
Schaible, Louis D., Shiloh, New Jersey													
Schaible, N. J.	N. J.	WL SX	K Cross	3	3	4	3	3	3	3	3	3	3
Schaible, N. J.	CNY	WL SX	K Cross	2	2	2	3	3	3	2	2	2	3
Schaible, N. J.	Penna.	WL SX	K Cross	1	2	3	3	1	2	2	1	2	1
Schaible, N. J.	Tenn.	WL SX	K Cross	2	2	3	4	1	2	1	3	2	2
Schaible, N. J.	Texas	WL SX	K Cross	3	3	3	3	2	4	3	4	3	2

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Schuyler Poultry Farms, LeRoy, New York													
Schuyler, N. Y.	CNY	WL SX	EGG Champs	2	2	2	2	1	3	2	2	4	3
Schuyler, N. Y.	Penna.	WL SX	EGG Champs	1	2	4	2	2	3	3	1	4	1
Schuyler Poultry Farms, LeRoy, New York													
Schuyler, N. Y.	Tenn.	WL SX	Egg Lines	2	2	4	2	2	2	1	2	2	1
Searle, Clarence, Centre Napan, New Brunswick													
Searle, N. B.	N. B.	RIRxCR BX	Red Cross	4	4	4	1	2	1	1	3	3	3
Shaver Poultry Breeding Farm, Galt, Ontario													
Shaver, Ont.	Alta.	WL SX	Starcross 288	1	1	3	1	1	2	2	1	4	2
Shaver, Ont.	B. C.	WL SX	Starcross 288	1	1	3	4	2	2	1	1	3	1
Shaver, Ont. (Greider, Penna.) & (MacPherson, Mich.)....	Cal. C	WL SX	Starcross 288		2	4		3	2	1		4	3
Shaver, Ont. (Greider, Penna.) & (MacPherson, Mich.)....	Cal. F	WL SX	Starcross 288	1	1	2	1	2	1	1	2	3	2
Shaver, Ont.	C. C.	WL SX	Starcross 288	1	1	2	3	3	2	2	2	3	3
Shaver, Ont.	Mo.	WL SX	Starcross 288	1	1	2	1	2	2	2	1	3	3
Shaver, Ont.	N. B.	WL SX	Starcross 288	1	1	2	2	1	4	4	1	2	3
Shaver, Ont.	N. H.	WL SX	Starcross 288	3	2	2	2	3	3	3	2	3	2
Shaver, Ont.	N. J.	WL SX	Starcross 288	2	2	1	4	3	2	2	2	4	4
Shaver, Ont.	CNY	WL SX	Starcross 288	3	3	2	3	3	2	3	3	4	4
Greider, Penna.	Penna.	WL SX	Starcross 288	1	1	1	3	2	2	2	1	2	2
Shaver, Ont.	R. I.	WL SX	Starcross 288	2	2	2	2	2	2	2	2	3	3
Shaver, Ont.	Tenn.	WL SX	Starcross 288	2	2	2	2	3	2	2	2	3	4
Swift & Co., Texas	Texas	WL SX	Starcross 288	2	2	1	1	3	3	3	2	3	2
Swift & Co., Wisc.	Wisc.	WL SX	Starcross 288	1	1	3	3	1	2	2	2	3	4
Shaver Poultry Breeding Farm, Galt, Ontario													
Greiders, Penna.	Penna.	WL SX	Starcross 292	2	1	1	3	2	3	3	2	3	2
Shaver Poultry Breeding Farm, Galt, Ontario													
Shaver, Ont.	Minn.	Syn x WL	Starcross 444	2	2	1	1	3	3	3	2	4	3
Shaver, Ont.	Mo.	Syn x WL	Starcross 444	3	3	1	2	3	2	2	3	4	1
Shaver Poultry Breeding Farm, Galt, Ontario													
Shaver, Ont.	N. B.	RIR SX	Starcross 555	3	4	3	2	3	2	2	3	3	4
Smyth, James, Nanaimo, British Columbia													
Smyth, B. C.	B. C.	WL SX	501 x 547	4	3	3	3	2	4	4	4	3	4

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING	STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Starline Breeders Hatchery, Saskatoon, Saskatchewan													
Starline, Sask.	C. C.	CGxWL BX	Pearlette	1	1	1	3	1	3	3	2	4	3
Stever Hatchery, Huntingdon, Pennsylvania													
Stever, Penna.	N. J.	WL SX	SC-300	3	3	2	2	2	4	4	2	4	2
Garrison, N. J. (Stever, Penna.).....	N. C.	WL SX	SC-300	3	3	4	1	2	4	4	2	4	2
Stever, Penna.	Penna.	WL SX	SC-300	2	2	2	1	2	4	4	1	4	1
Garrison-Stever, Penna.	Tenn.	WL SX	SC-300	2	3	3	3	2	4	4	3	2	2
Stone's Poultry Farm, Dinuba, California													
Stone, Cal.	Cal. C	WL SX	H 56		1	1		1	3	2		2	1
Stone, Cal.	Cal. F	WL SX	H 56	1	1	1	1	1	3	3	2	2	1
Check-R-Board, Fla.	Fla.	WL SX	H 56	2	2	1	2	3	2	2	2	2	2
Sturtevant Farms, Inc., Halifax, Massachusetts													
Sturtevant, Mass.	N. H.	RIRxWPR	Golden Sex Link	2	3	3	3	1	1	1	2	2	1
Sunnyside Hatchery, Watertown, Wisconsin													
Sunnyside, Wisc.	Wisc.	CGxWL BX	Wisco White	3	3	2	3	2	2	3	3	3	3
Townline Poultry Farm, Zeeland, Michigan													
Townline, Mich.	Mo.	WL SX	SC 30	3	3	3	3	4	3	2	4	2	3
Townline, Mich.	Penna.	WL SX	SC 30	3	3	3	3	3	3	3	2	3	3
Townline, Mich.	Wisc.	WL SX	SC 30	1	1	3	3	2	2	2	1	1	4
Triska, Eric, Edmonton, Alberta													
Triska, Alta.	Alta.	WL SX	Belmont 292	3	3	3	2	4	3	3	3	4	2
Triska, Alta.	C. C.	WL SX	Belmont 292	3	3	3	2	2	3	3	3	3	2
Triska, Eric, Edmonton, Alberta													
Triska, Alta.	Alta.	WL SX	Belmont 292A	4	4	4	1	3	2	3	4	3	3
Truway Farms, East Berlin, Pennsylvania													
Truway, Penna.	CNY	WL SX	Trubred #21	3	3	3	3	3	2	1	2	3	2
University of Tennessee, Knoxville, Tennessee													
Univ. of Tenn., Tenn.	Tenn.	WL PS	Pure Line	4	3	2	3	3	4	4	4	2	4
Vancrest Farms, Hyde Park, New York													
Vancrest, N. Y.	CNY	RIRxNH BX	All Red	4	4	4	4	4	1	2	4	1	1
Ward Poultry Farm, Independence, Iowa													
Ward, Iowa (Koskinen, N. Y.).....	Cal. C	WL x Syn	Wardcrost 356		3	2		3	2	2		3	2
Ward, Iowa (Koskinen, N. Y.).....	Cal. F	WL x Syn	Wardcrost 356	3	3	3	1	3	2	2	3	3	1
Ward, Iowa	Mo.	WL x Syn	Wardcrost 356	4	4	3	3	4	3	3	4	4	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IOENTIFICATION	TEST	BREEOING	STRAIN OR TRAOENAME	INCOME OVER FEED ANO CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER OOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Warren, J. J., Inc., North Brookfield, Massachusetts													
Warren, Mass. (Frost, Minn.).....	Minn.	WL SX	Warren Darby DX	3	3	4	4	4	2	1	2	3	2
Warren, Mass.	Mo.	WL SX	Warren Darby DX	3	3	3	3	3	2	2	3	2	4
Warren, Mass. (Richland, N. J.).....	N. J.	WL SX	Warren Darby DX	4	4	4	3	4	3	2	4	3	4
Dirkse, Mich.	Penna.	WL SX	Warren Darby DX	2	2	4	2	2	2	3	2	3	2
Dirkse, Mich.	R. I.	WL SX	Warren Darby DX	1	2	4	2	1	2	1	1	2	3
Warren, Mass.	Tenn.	WL SX	Warren Darby DX	3	3	3	3	3	2	2	3	3	3
Dirkse, Mich.	Wisc.	WL SX	Warren Darby DX	2	3	3	3	3	2	2	3	3	2
Warren, J. J., Inc., North Brookfield, Massachusetts													
Warren, Mass. (Riverside, Cal.) & (Chehalem, Ore.).....	Cal. C	WL x Syn	Warren J. J.		3	4		1	2	1		3	3
Warren, Mass. (Riverside, Cal.) & (Chehalem, Ore.).....	Cal. F	WL x Syn	Warren J. J.	1	2	3	3	3	2	2	1	3	3
Warren, Mass.	Penna.	WL x Syn	Warren J. J.	3	2	2	1	2	4	3	2	3	2
Warren, J. J., Inc., North Brookfield, Massachusetts													
Warren, Mass. (Chehalem, Ore.) & (Bundesen, Cal.).....	Cal. C	RIR x RIW	Sex-Sal-Link		3	2		1	3	4		4	1
Warren, Mass. (Chehalem, Ore.) & (Bundesen, Cal.).....	Cal. F	RIR x RIW	Sex-Sal-Link	4	4	3	3	2	2	1	4	4	1
Warren, Mass. (Swift & Co., S. D.).....	Wisc.	RIR x RIW	Sex-Sal-Link	3	4	4	3	4	2	1	4	1	3
Warren, J. J., Inc., North Brookfield, Massachusetts													
Warren, Mass.	Mo.	RIR x RIW	Sex-Sal-Link-F	3	3	3	1	3	2	1	3	2	1
Warren, Mass.	N. H.	RIR x RIW	Sex-Sal-Link-F	3	3	3	3	1	2	1	2	2	1
Warren, Mass.	CNY	RIR x RIW	Sex-Sal-Link-F	1	1	3	1	1	1	1	2	3	1
Warren, Mass.	Penna.	RIR x RIW	Sex-Sal-Link-F	2	3	4	1	2	1	1	3	3	3
Warren, Mass.	R. I.	RIR x RIW	Sex-Sal-Link-F	2	3	4	3	3	2	2	2	2	1
Webster Poultry Farms, Auburn, New York													
Webster, N. Y.	CNY	RIR PS	Certified	4	4	3	1	3	3	3	4	3	1
Welp's Breeding Farm, Bancroft, Iowa													
Welp, Iowa (Hegerfeld, Wisc.) & (Parkersburg, Iowa).....	Wisc.	MSC	Welp Line 542	3	3	2	3	2	2	3	2	3	1

QUARTILE RANK OF ENTRIES IN RANDOM SAMPLE EGG PRODUCTION TEST *(Continued)*

ENTRY IDENTIFICATION	TEST	BREEDING		STRAIN OR TRADENAME	INCOME OVER FEED AND CHICK COST ($)	EGG PRODUCTION (Hen housed) (No.)	AGE AT 50% PRODUCTION (Days)	GROWING MORTALITY (%)	LAYING MORTALITY (%)	EGG WEIGHT (oz)	LARGE AND EXTRA LARGE EGGS (%)	FEED PER DOZEN 24-OZ. EGGS (lbs)	ALBUMEN QUALITY (H.U.)	BLOOD SPOTS (%)
Welp's Breeding Farm, Bancroft, Iowa														
Welp's, Iowa (Gross, S. D.)	Cal. C	WL	SX	Welp Line 937		3	2		3	2	2		3	4
Welp's, Iowa (Gross, S. D.)	Cal. F	WL	SX	Welp Line 937	3	3	3	2	4	3	3	1	2	4
Welp's, Iowa	Iowa	WL	SX	Welp Line 937		2	3	2	2	2	3		3	2
Welp's, Iowa (Besch, Ottosen, Iowa) & (Brace, LuVerne, Iowa)	Kansas	WL	SX	Welp Line 937		2	4	4	2	3	4	2	3	4
Welp's, Iowa (Clark, Rock Falls, Wis.) & (Iliff, Black River Falls, Wis.)	Wisc.	WL	SX	Welp Line 937	3	3	2	3	3	3	3	2	2	4
White Farms, Corona, California														
White, Cal.	Cal. C	CGxWL		White Cross		1	1		1	2	2		3	2
White, Cal.	Cal. F	CGxWL		White Cross	2	2	1	2	3	3	3	3	3	2
White, Lorne, Port Hope, Ontario														
White, Ont.	C. C.	WL	SX	Whitecross 60	3	4	4	4	3	2	2	2	2	3
Wolf's Hatchery, Bloomsburg, Pennsylvania														
Wolf's, Penna.	Penna.	WL	SX	B-J	3	3	3	1	3	2	2	3	3	2
Wood Poultry Breeding Farm, Pomona, California														
Wood, Cal.	Cal. C	AW	BX	Austra-White		2	2		3	4	4		2	1
Wood, Cal.	Cal. F	AW	BX	Austra-White	4	3	3	2	1	3	3	3	2	1

OFFICIAL STANDARD EGG LAYING TESTS
1962-63

INTRODUCTION

Missouri - Missouri National Egg Laying Contest, Mountain Grove, Charles McElyea, Supervisor

New York - New York State Egg Laying Test, Farmingdale, Long Island, R. R. Stockbridge, Supervisor

Two official Standard Egg Laying Tests operate under a uniform set of rules which were adopted by and are revised by the Council of American Official Poultry Tests. It must be recognized that these rules cover only certain phases of the test procedures. Such things as feeding programs, lighting, and other management details are determined by the local test supervisor.

The point system that is used to determine the average number of points per bird is based on the egg weight of the individual eggs. The following chart gives the point value assigned to eggs of varying weights:

Wt. of Egg in Oz. per Doz.	Point Value Assigned	Wt. of Egg in Oz. per Doz.	Point Value Assigned
18	0.70	23	0.95
19	.75	24	1.00
20	.80	25	1.05
21	.85	26	1.10
22	.90		

Any egg weighing less than 17 ounces per dozen is not recorded. Any egg weighing more than 26 ounces per dozen is not given any additional point credit.

MISSOURI NATIONAL EGG LAYING CONTEST
(Descriptive Summary)

Cooperators in the Missouri National Egg Laying Contest send in between 45 and 50 chicks within one week of their hatch date in March. These birds are brooded intermingled and reared on range. All birds are vaccinated for Fowl Pox, Newcastle, Bronchitis, and Laryngotracheitis. The birds are approximately 25 weeks of age when they enter the laying house. Fifteen birds from each entry are housed, two entries of the same variety or breeding to the pen, which allows about 3.7 square feet per bird. All the pens are trapnested seven days per week. At the end of one month of trapnesting, the extra birds (all over 13) are removed. Of course, the trapnesting records are used to cull the poorest producers from an entry. During the contest, all birds are treated as nearly alike as possible by having identical pens and facilities, and being fed the same feed. Fresh water, grit, and oyster shell are provided at all times. An autopsy is performed by a licensed veterinarian on all dead birds.

During the first two months of the Missouri National Egg Laying Test, all of the eggs laid are weighed individually; points are assigned according to the chart above, and they are recorded. At the end of each of the first two months when all eggs laid are being weighed, the total points for a hen are determined by the addition of the points assigned to each egg which she laid during the month. After the first two months, eggs are weighed only three days per month, but the values in points which are assigned are projected to include the total number of eggs laid that month.

NEW YORK STATE EGG LAYING TEST
(Descriptive Summary)

Ready-to-lay pullets are received during the last week in September for the opening date of October 1, each year. The test lasts 350 days. All birds are given an anti-stress product in the drinking water for two days following their arrival. All birds are vaccinated for Laryngotracheitis on October 15th each year, and any pens not vaccinated for Fowl Pox are done at the same time. The vaccination is done at night. Birds are treated for worms.

Each compartment in the Test can hold two pens of thirteen birds, plus four extra birds. Extra birds are used as replacements during the first two weeks of the Test, if needed, and if not used, are removed on October 15th. Fresh feed is bought by competitive bid each month. All-mash is used, supplemented with a top grade poultry oats each day. Pellets of all-mash ration are also used. Grit, oyster shell, and fresh water are before the birds at all times.

Average actual egg weights and the percentage production on a hen-day and hen-housed basis are included in the monthly reports. Feed consumption figures are also supplied monthly. Weekly reports include a timely poultry article and the records for the week and to-date. The number of eggs, the point score, percent production, and the percent of large and extra-large eggs laid by each pen for the week are included.

For several years, we have operated an old hen test without force molting. The birds are moved to clean pens and trapnested for 365 days beyond the pullet year.

FIFTY-SECOND MISSOURI NATIONAL EGG LAYING CONTEST
MISSOURI STATE POULTRY EXPERIMENT STATION
MOUNTAIN GROVE, MISSOURI
1962-63

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Percent Mortality	Ave. March Egg Wt.
Bagby Poultry Farm, Sedalia, Mo.	SCWL	13	237.75	230.9	15.4	26.09
Bagby Poultry Farm, Sedalia, Mo.	SCWL	13	259.20	249.0	7.7	26.05
Brender's Leghorns Ferndale, N. Y.	SCWL	13	255.26	243.7	15.4	26.72
Brender's Leghorns, Ferndale, N. Y.	SCWL	13	255.45	247.3	7.7	26.35
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	287.57	282.2	7.7	25.52
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	246.37	247.5	30.8	24.49
Colonial Poultry Farms, Pleasant Hill, Mo.	SCWL	13	255.48	252.2	15.4	25.43
Colonial Poultry Farms, Pleasant Hill, Mo.	SCWL	13	266.53	256.3	0.0	26.07

FIFTY-SECOND MISSOURI NATIONAL EGG LAYING TEST - (Continued)

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Percent Mortality	Ave. March Egg Wt.
Dirkse Leghorn Farm Zeeland, Michigan	SCWL	13	277.63	264.7	0.0	25.93
Dirkse Leghorn Farm, Zeeland, Michigan	SCWL	13	298.07	283.6	0.0	26.01
Eby's Poultry Farm, Carrollton, Texas	SCWL	13	306.14	293.1	7.7	26.07
Eby's Poultry Farm, Carrollton, Texas	SCWL	13	289.65	288.0	7.7	25.21
Eby's Poultry Farm, Carrollton, Texas	SCWL	13	222.06	217.3	30.8	26.48
Eby's Poultry Farm, Carrollton, Texas	SCWL	13	281.87	276.6	0.0	25.72
Foreman Poultry Farm, Lowell, Michigan	SCWL	13	252.22	243.2	7.7	26.05
Foreman Poultry Farm, Lowell, Michigan	SCWL	13	192.95	185.6	30.8	26.53
Midwest Poultry Farm, Marshall, Mo.	SCWL	13	249.60	243.7	7.7	26.13
Midwest Poultry Farm, Marshall, Mo.	SCWL	13	245.05	238.7	23.1	26.12
Midwest Poultry Farm, Marshall, Mo.	SCWL	13	129.52	124.0	38.4	27.16
Missouri Valley Plty. Fr. Marshall, Mo.	SCWL	13	271.09	264.8	7.7	25.22
Missouri Valley Plty. Fr. Marshall, Mo.	SCWL	13	259.03	250.5	15.4	26.01
Missouri Valley Plty. Fr. Marshall, Mo.	SCWL	13	251.60	239.3	7.7	26.58
Rice Poultry Farm, Clinton, Mo.	SCWL	13	241.47	233.8	0.0	26.31
Rice Poultry Farm, Clinton, Mo.	SCWL	13	267.53	259.5	7.7	25.51
Shaver Poultry Br. Fr., Galt, Ont., Canada	SCWL	13	231.76	224.0	30.8	25.76
Shaver Poultry Br. Fr., Galt, Ont., Canada	SCWL	13	255.63	245.0	15.4	25.68
Shaver Poultry Br. Fr., Galt, Ont., Canada	SCWL	13	219.83	215.6	23.1	25.59
Shaver Poultry Br. Fr., Galt, Ont., Canada	SCWL	13	274.94	266.2	0.0	26.14
State Plty. Exp. Station, Mountain Grove, Mo.	SCWL	13	255.17	245.7	23.1	25.65
State Plty. Exp. Station, Mountain Grove, Mo.	SCWL	13	268.08	268.6	7.7	25.16
State Plty. Exp. Station, Mountain Grove, Mo.	SCWL	13	238.28	238.5	23.1	24.96
State Plty. Exp. Station, Mountain Grove, Mo.	SCWL	13	251.62	241.9	15.4	26.07
State Plty. Exp. Station, Mountain Grove, Mo.	SCWL	13	236.24	228.4	23.1	26.31
University of Missouri Columbia, Mo.	SCWL	13	255.57	260.8	15.4	25.02
University of Missouri Columbia, Mo.	SCWL	13	177.90	186.5	30.8	24.61
University of Missouri Columbia, Mo.	SCWL	13	221.28	235.0	23.1	23.93
Cashman Leghorn Farms, Webster, Ky.	SCBL	13	275.63	269.2	7.7	24.90

FIFTY-SECOND MISSOURI NATIONAL EGG LAYING TEST - (Continued)

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Percent Mortality	Ave. March Egg Wt.
Midwest Poultry Farm, Marshall, Mo.	SCBL	13	92.81	91.5	61.5	24.66
Missouri Valley Plty. Fr., Marshall, Mo.	SCBL	13	141.13	137.5	38.5	26.41
Missouri Valley Plty. Fr., Marshall, Mo.	SCBL	13	129.28	125.4	23.1	26.20
Moore, G. M., Marshall, Mo.	SCBL	13	107.07	106.7	38.5	26.66
Moore, G. M., Marshall, Mo.	SCBL	13	118.28	115.6	53.8	25.64
Colonial Poultry Farm, Pleasant Hill, Mo.	RIR	13	200.31	195.1	30.8	23.12
Harco Orchards So. Easton, Mass.	RIR	13	285.25	267.5	0.0	26.66
Harco Orchards So. Easton, Mass.	RIR	13	277.06	257.9	0.0	27.38
Ava Hatchery, Ava, Mo.	NH	13	215.77	206.8	0.0	26.09
Ava Hatchery, Ava, Mo.	NH	13	186.56	180.1	23.1	23.79
Colonial Poultry Farm, Pleasant Hill, Mo.	NH	13	146.95	159.8	38.5	23.42
Colonial Poultry Farm, Pleasant Hill, Mo.	WR	13	176.06	176.6	38.5	25.03
Rice Poultry Farm, Clinton, Mo.	Blk. Minorcas	13	144.27	148.5	23.1	24.30
Ava Hatchery, Ava, Mo.	Australorps	13	214.14	212.2	15.4	25.23
Ava Hatchery, Ava, Mo.	Australorps	13	179.01	175.1	38.4	26.64
State Plty. Exp. Station, Mountain Grove, Mo.	Australorps	13	209.51	201.0	15.4	25.13
Rice Poultry Farm, Clinton, Mo.	Anconas	13	122.63	127.1	38.5	24.14
Cashman Leghorn Farm, Webster, Ky.	Incross	13	268.55	266.9	7.7	25.19
Colonial Poultry Farm, Pleasant Hill, Mo.	Crossbred	13	255.33	252.0	7.7	25.19
Colonial Poultry Farm, Pleasant Hill, Mo.	Crossbred	13	258.88	257.2	15.4	25.45
Colonial Poultry Farm, Pleasant Hill, Mo.	Crossbred	13	228.53	230.2	7.7	24.39
Harco Orchards So. Easton, Mass.	Crossbred	13	293.83	271.4	0.0	27.80
Harco Orchards So. Easton, Mass.	Crossbred	13	287.90	267.0	0.0	26.88
Midwest Poultry Farm, Marshall, Mo.	Crossbred	13	230.79	222.8	23.1	25.77
Midwest Poultry Farm, Marshall, Mo.	Crossbred	13	227.67	219.0	30.8	26.34
Missouri Valley Plty. Fr., Marshall, Mo.	Crossbred	13	234.43	230.3	30.8	25.40
Parks Poultry Farm, Altoona, Pa.	Crossbred	13	275.27	257.5	0.0	27.04
Parks Poultry Farm, Altoona, Pa.	Crossbred	13	267.70	248.0	7.7	25.47
State Plty. Exp. Station, Mountain Grove, Mo.	Crossbred	13	272.61	260.5	0.0	26.57

U. S. GOVERNMENT PRINTING OFFICE : 1963 O - 716-429

FORTY-FIRST ANNUAL NEW YORK STATE EGG LAYING TEST
STATE UNIVERSITY AGRICULTURAL & TECHNICAL INSTITUTE
FARMINGDALE, L.I., N. Y. 1962-63.

Owner and Address	Breed	No. of Birds Entered	Points Per Bird	Eggs Per Bird	Percent Mortality	Ave. March Egg Wt.
Albermarle Acres, Unadilla, N. Y.	SCWL	13	251.18	241.6	23.1	26.00
Albermarle Acres, Unadilla, N. Y.	SCWL	13	247.99	232.5	7.7	27.04
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	280.58	268.8	0.0	25.76
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	267.19	259.3	7.7	25.03
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	258.91	250.2	7.7	25.29
Cashman Leghorn Farms, Webster, Ky.	SCWL	13	224.99	221.8	15.4	25.22
Colonial Poultry Farms, Pleasant Hill, Mo.	SCWL	13	292.70	271.8	7.7	27.15
Colonial Poultry Farms, Pleasant Hill, Mo.	SCWL	13	281.13	267.7	7.7	26.24
Drake, John W., Skillman, N. J.	SCWL	13	286.35	279.8	0.0	25.43
Experimental Pen, Farmingdale, L.I., N.Y.	SCWL	13	206.48	199.4	30.8	26.34
Foreman Poultry Farm Lowell, Michigan	SCWL	13	272.01	266.9	0.0	25.48
Foreman Poultry Farm, Lowell, Michigan	SCWL	13	269.18	261.4	7.7	25.65
Foreman Poultry Farm, Lowell, Michigan	SCWL	13	262.07	254.0	7.7	25.94
Foreman Poultry Farm, Lowell, Michigan	SCWL	13	259.89	255.4	15.4	25.73
Hendrickson, H.F. & R.G. Bridgehampton, N. Y.	SCWL	13	255.39	237.0	0.0	27.10
Hendrickson, H.F. & R.G. Bridgehampton, N. Y	SCWL	13	243.22	230.5	0.0	26.89
Anderson, Ralph W., Hanover, Mass.	Sex Link	13	275.59	254.8	0.0	27.68
Anderson, Ralph W., Hanover, Mass.	Sex Link	13	271.59	252.3	0.0	27.25
Harco Orchards So. Easton, Mass.	Sex Link	13	304.61	280.2	0.0	27.29
Harco Orchards So. Easton, Mass.	Sex Link	13	299.78	274.1	0.0	28.50
Harco Orchards So. Easton, Mass.	Sex Link	13	297.88	272.8	0.0	27.87
Harco Orchards So. Easton, Mass.	Sex Link	13	282.15	260.5	15.4	27.33
Harco Orchards So. Easton, Mass.	RIR	13	292.85	270.1	7.7	27.59
Harco Orchards So. Easton, Mass.	RIR	13	277.66	253.5	0.0	28.30
Harco Orchards So. Easton, Mass.	BPR	13	307.76	286.0	0.0	26.81
Harco Orchards So. Easton, Mass.	BPR	13	290.47	269.0	7.7	26.26
Shaver, Donald McQ., Galt, Ont., Canada	Br. Mothers	13	199.40	188.1	7.7	27.52
Shaver, Donald McQ., Galt, Ont., Canada	Br. Mothers	13	211.17	201.2	7.7	26.27
Shaver, Donald McQ., Galt, Ont., Canada	Br. Mothers	13	223.93	213.5	0.0	27.41